

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE		PAGE OF PAGES 1 3	
2. AMENDMENT/MODIFICATION NO. 0003		3. EFFECTIVE DATE 27-Feb-2002		4. REQUISITION/PURCHASE REQ. NO. W68MD9-1228-1347		5. PROJECT NO.(If applicable)	
6. ISSUED BY USA ENGINEER DISTRICT, SEATTLE ATTN: CENWS-CT P.O. BOX 3755 SEATTLE WA 98124-3755		CODE DACA67		7. ADMINISTERED BY (If other than item 6) See Item 6		CODE	
8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code)				X		9A. AMENDMENT OF SOLICITATION NO. DACA67-02-R-0204	
				X		9B. DATED (SEE ITEM 11) 23-Jan-2002	
						10A. MOD. OF CONTRACT/ORDER NO.	
						10B. DATED (SEE ITEM 13)	
CODE		FACILITY CODE					
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS							
<input checked="" type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offer <input type="checkbox"/> is extended, <input checked="" type="checkbox"/> is not extended. Offer must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required)							
13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.							
A.THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.							
B.THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(B).							
C.THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:							
D.OTHER (Specify type of modification and authority)							
E. IMPORTANT: Contractor <input type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) PROJECT: Improve Capehart Family Housing, Phase 3, Malmstrom AFB, Montana Address technical questions to: techbid@nws02.usace.army.mil							
<small>Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.</small>							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)			
15B. CONTRACTOR/OFFEROR _____ (Signature of person authorized to sign)		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA BY _____ (Signature of Contracting Officer)		16C. DATE SIGNED 27-Feb-2002	

SECTION SF 30 BLOCK 14 CONTINUATION PAGE

A. The purpose of this Amendment Number THREE (0003) is to provide for the following technical revisions to the solicitation, and to incorporate the transcript of, and a list of answers to the questions submitted at the Pre-proposal Conference held on February 6, 2002.

1. **DELETE** : Bid Schedule

INSERT: Revised Bid Schedule to incorporate additional optional line items

2. **DELETE** : Section 00800, Special Clauses

INSERT: Revised Section 00800, Special Clauses. SC-1.1 has been amended to accommodate the increase in the number of option items in the Schedule. The Index of Drawings (attached at the end of Section 00800) has been corrected to agree with actual drawing Plate Numbers and Titles and to indicate Revision Numbers. Note: All drawings identified as Revision Number R0003 or R0004 in the Drawing Table of Contents attached to this section are issued new with this amendment.

3. **DELETE**: Section 01025 - Payment

INSERT: Revised Section 01025 – Payment. Paragraph 1.1.1., Payment, has been added to assist the Contractor in determining the division of work between the Schedule Items addressed and to clarify items of work.

4. **DELETE**: Section 01501 – Construction Facilities and Temporary Controls

INSERT: Revised Section 01501 – Construction Facilities and Temporary Controls

5. **DELETE**: Section 02055 – Selective Demolition

INSERT: Revised Section 02055 - Selective Demolition

6. **DELETE**: Section 02553 – New Site Natural Gas Distribution

INSERT: Revised Section 02553 - New Site Natural Gas Distribution

7. **DELETE**: Section 02870 – Site Furnishings

8. **DELETE**: Section 02871 – Privacy Fencing

INSERT: Revised Section 02871 – Privacy Fencing

9. **DELETE**: Section 02930 – Lawns and Grasses

INSERT: Revised Section 02930 – Lawns and Grasses

10. **DELETE**: Section 02950 – Irrigation Sprinkler Systems

INSERT: Revised Section 02950 - Irrigation Sprinkler Systems

11. **DELETE**: Section 02955 – Trees and Shrubs

INSERT: Revised Section 02955 – Trees and Shrubs

12. **DELETE**: Section 09680 – Carpet

INSERT: Revised Section 09680 – Carpet

13. **DELETE:** Section 10550 – Postal Specialties
INSERT: Revised Section 10550 – Postal Specialties
14. **DELETE:** Section 11480 – Playground Equipment
INSERT: Revised Section 11480 - Playground Equipment
15. **ADD:** Section 12356 – Kitchen Casework
16. **DELETE:** Section 12491 – Horizontal Louver Blinds
INSERT: Revised Section 12491 – Horizontal Louver Blinds
17. **DELETE:** Section 12574 – Outdoor Site Items
INSERT: Revised Section 12574 – Outdoor Site Items
18. **DELETE:** Section 15400 –Plumbing
INSERT: Revised Section 15400 - Plumbing
19. **DELETE:** Section 16140 – Wiring Devices General
INSERT: Revised Section 16140 – Wiring Devices General
20. **ADD:** Section 16491 - Fuses

B. THE PROPOSAL DUE DATE AND TIME REMAINS AT 8 MARCH 2002, 3 P.M. PST.

C. NOTICE TO BIDDERS: Bidders must acknowledge receipt of this amendment by number and date on Standard Form 1442 BACK, in Block 19, or by telegram. Please mark the outside of the envelope in which the bid is enclosed to show the amendment received

D. All Technical Amendments are available for download this date on the Army Corps of Engineers website at <http://www.nws.usace.army.mil/ct/>.

Enclosures:

Bid Schedule

Section 00800, with revised Index of Drawings

Revised Sections 01025, 01501, 02055, 02553, 02871, 02930, 02950, 02955, 09680, 10550, 11480, 12491, 12574, 15400, 16140

New Sections 12356 and 16491

Minutes of Preproposal Meeting

List of Questions/Answers From Preproposal Meeting

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SCHEDULE

<u>Item No.</u>	<u>Description of Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Amount</u>
BASE ITEMS					
0001	Provide all Labor, Materials, Equipment, and Transportation to Complete Demolition and Renovation of Buildings 4009 through 4016, 4029, 4030 and 4031. The work includes: Patio Slabs, Building Walks, Screen Fences, and all Grading and Landscaping within a line 50 feet beyond the Building Walls; All Building Utility Connections (gas, storm drain, sewer, water, power, Tel/CATV) (See Section 01025 "Payment" for additional information concerning requirements associated with this Item). Except for Items 0007, 0008, 0009, 0010, 0011, 0012, 0013, 0014, 0019, 0020, 0021 and 0022.	1	JOB	L.S.	\$_____
0002	Provide all Labor, Materials, Equipment, and Transportation for Site Utilities (gas, storm drainage, power, Tel/CATV) including Grading and Resodding of disturbed areas for Buildings 4009 through 4016 and 4028 through 4031 and provisions for or extensions of utility services to Buildings 4017 through 4021, 4028, 4007 and 4008 to the extent described in Section 01025 "Payment" for this Item. (See Section 01025 "Payment" for a description of Utility work included in this Item)	1	JOB	L.S.	\$_____
TOTAL BASE ITEMS					\$_____
OPTIONAL ITEMS					
0003	Provide all Labor, Materials, Equipment, and Transportation for Completion of the Site Utilities (gas, storm drainage, power, Tel/CATV) including Grading and Resodding of disturbed areas. (See Section 01025 "Payment" for a description of Utility work included in this Item.)	1	JOB	L.S.	\$_____
0004	Provide all Labor, Materials, Equipment, and Transportation for Renovation of Type A3 Building 4025. The work includes: Patio Slabs, Building Walks, Screen Fences, and all Grading and Landscaping within a line 50 feet beyond the Building Walls; All Building Utility Connections (gas, storm drain, sewer, water, power, Tel/CATV) (See Section 01025 "Payment" for additional information concerning requirements associated with this Item). Except for Items 0007, 0011,	1	JOB	L.S.	\$_____

02009/DJ

Improve Capehart Family Housing, Phase 3, Malmstrom AFB, Montana

<u>Item No.</u>	<u>Description of Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Amount</u>
	0019 and 0020.				
0005	Provide all Labor, Materials, Equipment, and Transportation for Renovation of Type B1 Buildings 4018, 4021, 4022, 4023, 4024, 4026, 4027 and 4028. The work includes: Patio Slabs, Building Walks, Screen Fences, and all Grading and Landscaping within a line 50 feet beyond the Building Walls; All Building Utility Connections (gas, storm drain, sewer, water, power, Tel/CATV) (See Section 01025 "Payment" for additional information concerning requirements associated with this Item). Except for Items 0008, 0012, 0019 and 0021.				NSP
0005AA	All work for Buildings 4018 and 4021	NTE 2	Bldg	\$_____	NTE \$_____
0005AB	All work for Building 4028	1	JOB	LS	\$_____
0005AC	All work for Buildings 4022, 4023, 4024, 4026 and 4027	NTE 5	Bldg	\$_____	NTE \$_____
0006	Provide all Labor, Materials, Equipment, and Transportation for Renovation of Type B2 Buildings 4017, 4019 and 4020. The work includes: Patio Slabs, Building Walks, Screen Fences, and all Grading and Landscaping within a line 50 feet beyond the Building Walls; All Building Utility Connections (gas, storm drain, sewer, water, power, Tel/CATV) (See Section 01025 "Payment" for additional information concerning requirements associated with this Item). Except for Items 0009, 0013, 0019 and 0022.	NTE 3	Bldg	\$_____	NTE \$_____
0007	Provide all Labor, Materials, Equipment, and Transportation to Reroof Existing Portions of Type A3 Buildings 4015 and 4025. Work includes removal and disposal of two existing layers of roofing.	NTE 2	Bldg	\$_____	NTE \$_____
0008	Provide all Labor, Materials, Equipment, and Transportation to Reroof Existing Portions of Type B1 Buildings 4010, 4013, 4016, 4018, 4021, 4022, 4023, 4024, 4026, 4027, 4028 and 4029. Work includes removal and disposal of two existing layers of roofing.	NTE 12	Bldg	\$_____	NTE \$_____
0009	Provide all Labor, Materials, Equipment, and Transportation to Reroof Existing Portions of Type	NTE 6	Bldg	\$_____	NTE \$_____
DACA67-02-R-0204	00010-6a				R0003

<u>Item No.</u>	<u>Description of Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Amount</u>
	B2 Buildings 4012, 4014, 4017, 4019, 4020 and 4030. Work includes removal and disposal of two existing layers of roofing.				
0010	Provide all Labor, Materials, Equipment, and Transportation to Reroof Existing Portions of Type B3 Buildings 4009, 4011 and 4031. Work includes removal and disposal of two existing layers of roofing.	NTE 3	Bldg	\$_____	NTE \$_____
0011	Provide all Labor, Materials, Equipment, and Transportation for Upgrade from Crawlspace Foundation Under the Living Room Addition to a Finished Basement under the Addition for Basements at Type A3 Buildings 4015 and 4025.	NTE 2	Bldg	\$_____	NTE \$_____
0012	Provide all Labor, Materials, Equipment, and Transportation for Upgrade from Crawlspace Foundation Under the Living Room Addition to a Finished Basement under the Addition for Basements at Type B1 Buildings 4010, 4013, 4016, 4018, 4021, 4022, 4023, 4024, 4026, 4027, 4028 and 4029.	NTE 12	Bldg	\$_____	NTE \$_____
0013	Provide all Labor, Materials, Equipment, and Transportation for Upgrade from Crawlspace Foundation Under the Living Room Addition to a Finished Basement under the Addition for Basements at Type B2 Buildings 4012, 4014, 4017, 4019, 4020 and 4030.	NTE 6	Bldg	\$_____	NTE \$_____
0014	Provide all Labor, Materials, Equipment, and Transportation for Upgrade from Crawlspace Foundation Under the Living Room Addition to a Finished Basement under the Addition for Basements at Type B3 Buildings 4009, 4011 and 4031.	NTE 3	Bldg	\$_____	NTE \$_____
0015	Provide all Labor, Materials, Equipment, and Transportation for Tot Lot to Include Concrete Slab, Walks, Rubber Surface, Grading, Landscaping, Playground Equipment and Adjacent Furnishings.	1	JOB	L.S.	\$_____
0016	Provide all Labor, Materials, Equipment, and Transportation for Jogging Path, Grading, Hydroseeding and Site Furnishings (Four (4) Adjacent Benches/Concrete Pads/Trash Receptacles. See Plate L1.1 & A1.1)	1	JOB	L.S.	\$_____
0017	Provide all Labor, Materials, Equipment, and Transportation for Masonry Enclosure for the Gas Regulator. (Note: Gas regulator is provided under	1	JOB	L.S.	\$_____

02009/DJ

Improve Capehart Family Housing, Phase 3, Malmstrom AFB, Montana

<u>Item No.</u>	<u>Description of Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Amount</u>
	Schedule Item No. 0002.)				
0018	Provide all Labor, Materials, Equipment, and Transportation for Monument Entry Signs. (2 required).	1	JOB	L.S.	\$_____

0019	Provide all Labor, Materials, Equipment, and Transportation for Common Area Sidewalks, as shown on Sheet C1.3.	1	JOB	L.S.	\$_____
0020	Provide all Labor, Materials, Equipment, and Transportation to Improve Drainage per Detail 1/C1.1 and to Grade and Resod Disturbed Lawn Areas per Notes and Details on Sheet C1.1 for a Type A3 Building.	NTE 8	Bldg	\$_____	NTE \$_____
0021	Provide all Labor, Materials, Equipment, and Transportation to Improve Drainage per Detail 1/C1.1 and to Grade and Resod Disturbed Lawn Areas per Notes and Details on Sheet C1.1 for a Type B1 Building.	NTE 3	Bldg	\$_____	NTE \$_____
0022	Provide all Labor, Materials, Equipment, and Transportation to Improve Drainage per Detail 1/C1.1 and to Grade and Resod Disturbed Lawn Areas per Notes and Details on Sheet C1.1 for a Type B2 Building.	NTE 3	Bldg	\$_____	NTE \$_____
0023	Provide all Labor, Materials, Equipment, and Transportation for Irrigation System as shown on Sheet L1.2 and Associated Details.	1	L.S.	\$_____	\$_____
0024	Provide all Labor, Materials, Equipment, and Transportation to Install all Common Area Plantings (Sod, Hydroseed, Trees, Shrubs, Topsoil, Amendments, Etc.) as shown on Sheet L1.1 and Associated Details.	1	L.S.	\$_____	\$_____

TOTAL OPTIONAL ITEMS**NTE \$_____****TOTAL BASE AND OPTIONAL ITEMS****NTE \$_____**

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SPECIAL CLAUSES

SC-1. COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK (APR 1984) (FAR 52.211-10).

The Contractor shall be required to (a) commence work under this Contract within 10 calendar days after the date the Contractor receives the notice to proceed, (b) prosecute the work diligently, and (c) complete the entire work ready for use not later than 330 calendar days after date of receipt by Contractor of notice to proceed. The time stated for completion shall include final cleanup of the premises.

SC-1.1 OPTION FOR INCREASED QUANTITY

a. The Government may increase the quantity of work awarded by exercising Optional Items 0003, 0004, 0005, 0006, 0007, 0008, 0009, 0010, 0011, 0012, 0013, ~~and 0014,~~ 0015, 0016, 0017, 0018, 0019, 0020, 0021, 0022, 0023 and 0024 within 120 days of the receipt by the Contractor of the notice to proceed. The notice to proceed on work Items added by exercise of the options will be given upon execution of consent of surety.

b. The parties hereto further agree that any options herein shall be considered to have been exercised at the time the Government deposits written notification to the Contractor in the mails.

c. The time allowed for completion of the optional item awarded under this contract will be the same as that for the base items, and will be measured from the date of receipt of the notice to proceed for the base items.

SC-1.2 EXCEPTION TO COMPLETION PERIOD

In case the Contracting Officer determines that completion of seeding, sodding, and planting, and establishment of same is not feasible within the completion period(s) stated above, the Contractor shall accomplish such work in the first planting period following the contract completion period and shall complete such work as specified, unless other planting periods are directed or approved by the Contracting Officer.

SC-2. LIQUIDATED DAMAGES - CONSTRUCTION (APR 1984) (FAR 52.211-12)

(a) If the Contractor fails to complete the work within the time specified in the Contract, or any extension, the Contractor shall pay to the Government as liquidated damages, the sum of \$841 for each day of delay.

(b) If the Government terminates the Contractor's right to proceed, the resulting damage will consist of liquidated damages until such reasonable time as may be required for final completion of the work together with any increased costs occasioned the Government in completing the work.

(c) If the Government does not terminate the Contractor's right to proceed, the resulting damage will consist of liquidated damages until the work is completed or accepted.

(d) Exception to Liquidated Damage: In case the Contracting Officer determines that completion of work stated above in paragraph Exception to Completion Period(s) is not feasible during the completion period(s) stated in SC-1, such work will be exempted from liquidated damages.

SC-3. DELETED.

SC-4. DELETED.

SC-5. INSURANCE - WORK ON A GOVERNMENT INSTALLATION (SEP 1989) (FAR 52.228-5)

(a) The Contractor shall, at its own expense, provide and maintain during the entire performance period of this Contract at least the kinds and minimum amounts of insurance required in the Insurance Liability Schedule or elsewhere in the Contract.

(b) Before commencing work under this Contract, the Contractor shall certify to the Contracting Officer in writing that the required insurance has been obtained. The policies evidencing required insurance shall contain an endorsement to the effect that any cancellation or any material change adversely affecting the Government's interest shall not be effective:

(1) for such period as the laws of the State in which this Contract is to be performed prescribe; or

(2) until 30 days after the insurer or the Contractor gives written notice to the Contracting Officer, whichever period is longer.

(c) The Contractor shall insert the substance of this clause, including this paragraph (c), in subcontracts under this Contract that require work on a Government installation and shall require subcontractors to provide and maintain the insurance required in the Schedule or elsewhere in the Contract. The Contractor shall maintain a copy of all subcontractors' proofs of required insurance, and shall make copies available to the Contracting Officer upon request.

(d) Insurance Liability Schedule (FAR 28.307-2)

(1) Workers' compensation and employer's liability. Contractors are required to comply with applicable Federal and State workers' compensation and occupational disease statutes. If occupational diseases are not compensable under those statutes, they shall be covered under the employer's liability section of the insurance policy, except when Contract operations are so commingled with a Contractor's commercial operation that it would not be practical to require this coverage. Employer's liability coverage of at least \$100,000 shall be required, except in states with exclusive or monopolistic funds that do not permit workers' compensation to be written by private carriers.

(2) General Liability.

(a) The Contracting Officer shall require bodily injury liability insurance coverage written on the comprehensive form of policy of at least \$500,000 per occurrence.

(b) Property damage liability insurance shall be required only in special circumstances as determined by the agency.

(3) Automobile liability. The Contracting Officer shall require automobile liability insurance written on the comprehensive form of policy. The policy shall provide for bodily injury and property damage liability covering the operation of all automobiles used in connection with performing the Contract. Policies covering automobiles operated in the United States shall provide coverage of at least \$200,000 per person and \$500,000 per occurrence for bodily injury and \$20,000 per occurrence for property damage. The amount of liability coverage on other policies shall be commensurate with any legal requirements of the locality and sufficient to meet normal and customary claims.

(4) Aircraft public and passenger liability. When aircraft are used in connection with performing the Contract, the Contracting Officer shall require aircraft public and passenger liability insurance. Coverage shall be at least \$200,000 per person and \$500,000 per occurrence for bodily injury, other than passenger liability, and \$200,000 per occurrence for property damage. Coverage for passenger liability bodily injury shall be at least \$200,000 multiplied by the number of seats or passengers, whichever is greater.

(5) Environmental Liability. If this contract includes the transport, treatment, storage, or disposal of hazardous material waste the following coverage is required.

The Contractor shall ensure the transporter and disposal facility have liability insurance in effect for claims arising out of the death or bodily injury and property damage from hazardous material/waste transport, treatment, storage and disposal, including vehicle liability and legal defense costs in the amount of \$1,000,000.00 as evidenced by a certificate of insurance for General, Automobile, and Environmental Liability Coverage. Proof of this insurance shall be provided to the Contracting Officer.

SC-6. – DELETED.

SC-7. PERFORMANCE OF WORK BY THE CONTRACTOR (APR 1984) (FAR 52.236-1): The Contractor shall perform on the site, and with its own organization, work equivalent to at least fifteen percent (15%) of the total amount of work to be performed under the Contract. The percentage may be reduced by a supplemental agreement to this Contract if, during performing the work, the Contractor requests a reduction and the Contracting Officer determines that the reduction would be to the advantage of the Government.

SC-8. PHYSICAL DATA (APR 1984) (FAR 52.236-4): Data and information furnished or referred to below is for the Contractor's information. The Government will not be responsible for any interpretation of or conclusion drawn from the data or information by the Contractor.

(a) Physical Conditions: The indications of physical conditions on the drawings and in the specifications are the result of site investigations by test holes shown on the drawings.

(b) Weather Conditions: Each bidder shall be satisfied before submitting his bid as to the hazards likely to arise from weather conditions. Complete weather records and reports may be obtained from any National Weather Service Office.

(c) Transportation Facilities: Each bidder, before submitting his bid, shall make an investigation of the conditions of existing public and private roads and of clearances, restrictions, bridge load limits, and other limitations affecting transportation and ingress and egress at the jobsite. The unavailability of transportation facilities or limitations thereon shall not become a basis for claims for damages or extension of time for completion of the work.

SC-9. DELETED.

SC-10. LAYOUT OF WORK (APR 1984) (FAR 52.236-17): The Contractor shall lay out its work from Government-established base lines and bench marks indicated on the drawings, and shall be responsible for all measurements in connection with the layout. The Contractor shall furnish, at its own expense, all stakes, templates, platforms, equipment, tools, materials, and labor required to lay out any part of the work. The Contractor shall be responsible for executing the work to the lines and grades that may be established or indicated by the Contracting Officer. The Contractor shall also be responsible for maintaining and preserving all stakes and other marks established by the Contracting Officer until authorized to remove them. If such marks are destroyed by the Contractor or through its negligence before their removal is authorized, the Contracting Officer may replace them and deduct the expense of the replacement from any amounts due, or to become due, to the Contractor.

SC-11. THROUGH SC-13. DELETED.

SC-14. EQUIPMENT OWNERSHIP AND OPERATING EXPENSE SCHEDULE (MAR 1995)-(EFARS 52.231-5000)

(a) This clause does not apply to terminations. See 52.249-5000, Basis for Settlement of Proposals and FAR Part 49.

(b) Allowable cost for construction and marine plant and equipment in sound workable condition owned or controlled and furnished by a contractor or subcontractor at any tier shall be based on actual cost data for each piece of equipment or groups of similar serial and series for which the Government can determine both ownership and operating costs from the contractor's accounting records. When both ownership and operating costs cannot be determined for any piece of equipment or groups of similar serial or series equipment from the contractor's accounting records, costs for that equipment shall be based upon the applicable provisions of EP 1110-1-8, Construction Equipment Ownership and Operating Expense Schedule, Region IV. Working conditions shall be considered to be average for determining equipment rates using the schedule unless specified otherwise by the Contracting Officer. For equipment not included in the schedule, rates for comparable pieces of equipment may be used or a rate may be developed using the formula provided in the schedule. For forward pricing, the schedule in effect at the time of negotiations shall apply. For retroactive pricing, the schedule in effect at the time the work was performed shall apply.

(c) Equipment rental costs are allowable, subject to the provisions of FAR 31.105(d)(ii) and FAR 31.205-36. Rates for equipment rented from an organization under common control, lease-purchase arrangements, and sale-leaseback arrangements, will be determined using the schedule, except that actual rates will be used for equipment leased from an organization under

common control that has an established practice of leasing the same or similar equipment to unaffiliated lessees.

(d) When actual equipment costs are proposed and the total amount of the pricing action exceeds the small purchase threshold, the contracting officer shall request the contractor to submit either certified cost or pricing data, or partial/limited data, as appropriate. The data shall be submitted on Standard Form 1411, Contract Pricing Proposal Cover Sheet.

(e) Copies of EP1110-1-8 "Construction Equipment Ownership and Operating Expense Schedule" Volumes 1 through 12 are available in Portable Document Format (PDF) only and can be viewed or downloaded at <http://www.usace.army.mil/inet/usace-docs/eng-pamphlets/cecw.htm>. Copies of the CD-ROM (Volumes 1-12) are also available through either the Superintendent of Documents or Government bookstores. For additional information telephone 202-512-2250, or access on the Internet at http://www.access.gpo.gov/su_docs.

SC-15. PAYMENT FOR MATERIALS DELIVERED OFF-SITE (MAR 1995)-(EFARS 52.232-5000)

(a) Pursuant to FAR clause 52.232-5, Payments Under Fixed Priced Construction Contracts, materials delivered to the contractor at locations other than the site of the work may be taken into consideration in making payments if included in payment estimates and if all the conditions of the General Provisions are fulfilled. Payment for items delivered to locations other than the work site will be limited to: (1) materials required by the technical provisions; or (2) materials that have been fabricated to the point where they are identifiable to an item of work required under this contract.

(b) Such payment will be made only after receipt of paid or receipted invoices or invoices with canceled check showing title to the items in the prime contractor and including the value of material and labor incorporated into the item. In addition to petroleum products, payment for materials delivered off-site is limited to the following items. Any other construction material stored offsite may be considered in determining the amount of a progress payment.

SC-16. DELETED

SC-17. DELETED.

SC-18. CONTRACT DRAWINGS, MAPS, AND SPECIFICATIONS (OCT 1996) (52.0236-4001 EBS)

(a) The Government--

(1) Will provide the Contractor, without charge, one set of contract drawings and one set of specifications in electronic format on a compact disk. The Government will not give the Contractor any hard copy paper drawings or specifications for any contract resulting from this solicitation.

(b) The Contractor shall--

(1) check all drawings furnished immediately upon receipt;

- (2) Compare all drawings and verify the figures before laying out the work;
 - (3) Promptly notify the Contracting Officer of any discrepancies;
and
 - (4) Be responsible for any errors which might have been avoided by complying with this paragraph (b).
- (c) Large scale drawings shall, in general, govern small scale drawings. Figures marked on drawings shall, in general, be followed in preference to scale measurements.
- (d) Omissions from the drawings or specifications or the misdescription of details of work which are manifestly necessary to carry out the intent of the drawings and specifications, or which are customarily performed, shall not relieve the Contractor from performing such omitted or misdescribed details of the work, but shall be performed as if fully and correctly set forth and described in the drawings and specifications.
- (e) The work shall conform to the specifications and the contract drawings identified in the index of drawings attached at the end of the Special Clauses.

SC-19. Through SC-22 DELETED.

SC-23. RECOVERED MATERIALS: The Corps of Engineers encourages all bidders to utilize recovered materials to the maximum extent practicable. The Contractor shall comply with the provisions of the Executive Order EO 13101 within the scope of his operations. The attached APPENDIX R contains procurement guidelines for products containing recovered materials. The Contractor shall fill out RECOVERED MATERIALS DETERMINATION FORM attached at the end of APPENDIX R and submit it to the Contracting Officer.

APPENDIX R

PART 247 - COMPREHENSIVE PROCUREMENT GUIDELINE FOR PRODUCTS CONTAINING RECOVERED MATERIALS

40 CFR Ch. 1 (9-1-99 Edition)

Subpart B-Item Designations

§ 247.10 Paper and paper products.

Paper and paper products, excluding building and construction paper grades.

§ 247.11 Vehicular products.

- (a) Lubricating oils containing re-refined oil, including engine lubricating oils, hydraulic fluids, and gear oils, excluding marine and aviation oils.
- (b) Tires, excluding airplane tire
- (e) Reclaimed engine coolants, excluding coolants used in non-vehicular applications.

§ 247.12 Construction products.

- (a) Building insulation product including the following items:
 - (1) Loose-fill insulation, including but not limited to cellulose fiber, mineral fibers (fiberglass and rock vermiculite, and perlite;
 - (2) Blanket and batt insulation, including but not limited to mineral fibers (fiberglass and rock wool);
 - (3) Board (sheathing, roof decking wall panel) insulation, including but not limited to structural fiberboard and laminated paperboard products perlite composite board, polyurethane, polyisocyanurate, polystyrene, phenolics, and composites; and
 - ~~(2)~~ (4) Spray-in-place insulation, including but not limited to foam-in-place polyurethane and polyisocyanurate and spray-on cellulose.
- (b) Structural fiberboard and laminated paperboard products for applications other than building insulation, including building board, sheathing shingle backer, sound deadening board, roof insulating board, insulating wallboard, acoustical and non-acoustical ceiling tile, acoustical and non-acoustical lay-in panels, floor underlayments, and roof overlay (coverboard).
- (c) Cement and concrete, including concrete products such as pipe and block, containing coal fly as ground granulated blast furnace (GGBF) slag.
- (d) Carpet made of polyester fiber use in low- and medium-wear applications.
- (e) Floor tiles and patio blocks containing recovered rubber or plastic.
- (f) Shower and restroom dividers/partitions containing recovered plastic or steel.
- (g) (1) Consolidated latex paint used for covering graffiti; and
- (2) Reprocessed latex paint used for interior and exterior architectural applications such as wallboard, ceilings, and trim; gutter boards; and concrete, stucco, masonry, wood and metal surfaces.

§247.13 Transportation products.

- (a) Traffic barricades and traffic cones used in controlling or restricting vehicular traffic.
- (b) Parking stops made from concrete or containing recovered plastic or rubber.
- (c) Channelizers containing recovered plastic or rubber.
- (d) Delineators containing recovered plastic, rubber, or steel.
- (e) Flexible delineators containing recovered plastic.

§ 247.14 Park and recreation products

- (a) Playground surfaces and running tracks containing recovered rubber or plastic.
- (b) Plastic fencing containing recovered plastic for use in controlling snow or sand drifting and as a warning/safety barrier in construction or other applications.

§ 247.15 Landscaping products.

- (a) Hydraulic mulch products containing recovered paper or recovered wood used for hydroseeding and as an over-spray for straw mulch in landscaping, erosion control, and soil reclamation.
- (b) Compost made from yard trimmings, leaves, and/or grass clippings for use in landscaping, seeding of grass or other plants on roadsides and embankments, as a nutritious mulch under trees and shrubs, and in erosion control and soil reclamation.
- (c) Garden and soaker hoses containing recovered plastic or rubber.
- (d) Lawn and garden edging containing recovered plastic or rubber.

§ 247.16 Non-paper office product.

- (a) Office recycling containers and office waste receptacles.
- (b) Plastic desktop accessories.
- (c) Toner cartridges.
- (d) Binders.
- ~~(f)-(e)~~ Plastic trash bags.
- ~~(g)-(f)~~ Printer ribbons.
- ~~(h)-(g)~~ Plastic envelopes.

§ 247.17 Miscellaneous products.

Pallets containing recovered wood, plastic, or paperboard.

RECOVERED MATERIALS DETERMINATION FORM

Instructions

This form is to be completed by the procurement originator when EPA-designated items included in the Affirmative Procurement Program for Recovered Materials are being procured from outside vendors. For questions on whether the product counts as "EPA designated" or what the required recycled content is, refer to product descriptions on EPA's website at <http://www.epa.gov/cpg>. This form is not required for items requisitioned from established Federal supply sources.

1. The procurement originator lists which item(s) apply to the procurement request, the required recycled content, the actual recycled content, and signs and dates the appropriate Certification on the back of this form.
2. If an exemption is being claimed, the procurement originator's unit commander also signs the Certification on the back of this form.
3. The completed form becomes part of the contracting office contract file.

Procurement Request No. _____

The EPA-designated items being procured are:

- ___ Building insulation
- ___ Flowable fill
- ___ Latex paint
- ___ Floor tiles
- ___ Laminated paperboard
- ___ Structural fiberboard
- ___ Polyester carpet
- ___ Carpet Backing
- ___ Carpet Cushion
- Cement & concrete containing:
 - ___ Coal fly ash
 - ___ Ground granulated blast furnace slag
- ___ Binders
(paper, solid plastic or plastic covered)
- ___ Plastic presentation folders
- ___ Plastic file folders
- ___ Plastic clip portfolios
- ___ Plastic clipboards
- ___ Plastic envelopes
- ___ Office recycling containers
- ___ Office waste receptacles
- ___ Plastic desktop accessories

- ___ Printing and writing papers
- ___ Printer ribbons
- ___ Toner cartridges
- ___ Awards and plaques
- ___ Playground surfaces
- ___ Park and recreational furniture
- ___ Running tracks
- ___ Playground equipment
- ___ Traffic barricades
- ___ Signage
- ___ Traffic cones
- ___ Channelizers
- ___ Delineators
- ___ Flexible delineators
- ___ Parking stops
- ___ Plastic fencing (snow or erosion control, safety barriers)
- ___ Engine coolants
- ___ Re-refined lubricating oils
- ___ Retread tires
- ___ Garden and soaker hoses
- ___ Lawn and garden edging
- ___ Patio blocks
- ___ Landscaping timbers and posts (plastic lumber)
- ___ Compost from yard trimmings or food waste
- ___ Commercial/industrial sanitary tissue products
- ___ Sorbents
- ___ Industrial Drums
- ___ Railroad grade crossings/surfaces
- ___ Pallets
- ___ Paperboard and packaging
- ___ Strapping and stretch wrap
- ___ Shower & restroom dividers/partitions
- ___ Plastic trash bags
- ___ Mats
- ___ Hydraulic mulch
- ___ Tray liners
- ___ Newsprint

CERTIFICATION

Procurement Request No. _____

Complete Part A or Part B as appropriate:

A. I hereby certify the Statement of Work/Specifications for the requisition of all materials listed on this form complies with EPA standards for recycled/recovered materials content.

Procurement Originator's Signature

Date

B. The following item does not comply with EPA standards for recycled/recovered materials *(please complete a separate justification for each noncompliant item purchased as part of this procurement action)*: _____

The exemption being claimed for this purchase is:

___ The product does not meet appropriate performance standards

___ The product is not available within a reasonable time frame

___ The product is not available competitively (from two or more sources)

___ The product is only available at an unreasonable price (it costs more than a comparable non-recycled-content product). The recycled-content product costs \$_____ per _____ and the non-recycled-content product costs \$_____ per _____

Procurement Originator

Date

Commander

Date

INDEX OF DRAWINGS

IMPROVE CAPEHART HOUSING, PHASE 3
MALMSTROM AFB, MONTANA
NZAS 8600017
227s/711-20-01

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2	G1.2	ABBREVIATIONS AND SYMBOLS	<u>R0003</u>	30 NOV 01
3	D1.1	SITE DEMOLITION PLAN		30 NOV 01
4	C1.1	SITE GRADING PLAN	<u>R0003</u>	30 NOV 01
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8	C1.5	STORM WATER DRAINAGE PLAN <u>PROFILES</u>		30 NOV 01
9	C1.6	STORM WATER DRAINAGE PLAN <u>PROFILES</u>		30 NOV 01
10	C1.7	GAS PLAN	<u>R0003</u>	30 NOV 01
11	C1.8	SITE DETAILS	<u>R0003</u>	30 NOV 01
12	C1.9	SITE DETAILS		30 NOV 01
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15	L2.1	LANDSCAPE DETAILS <u>SHEET</u>	<u>R0003</u>	30 NOV 01
16	A1.1	<u>ARCHITECTURAL</u> SITE PLAN AND PROJECT PHASING	<u>R0003</u>	30 NOV 01
17	A2.1	DEMOLITION PLAN UNIT A3 (FIRST FLOOR AND BASEMENT)	<u>R0003</u>	30 NOV 01

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22	A3.1	DEMOLITION RENOVATION PLAN UNIT A3 (FIRST FLOOR AND BASEMENT)	<u>R0003</u>	30 NOV 01
23	A3.2	DEMOLITION RENOVATION PLAN UNIT B1 (FIRST, <u>SECOND FLOOR</u> AND BASEMENT)	<u>R0003</u>	30 NOV 01
24	A3.3	DEMOLITION RENOVATION PLAN UNIT B2 (FIRST FLOOR AND BASEMENT)	<u>R0003</u>	30 NOV 01
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27	A4.1	ROOF PLAN (UNITS A3 AND B1)	<u>R0003</u>	30 NOV 01
28	A4.2	ROOF PLAN (UNITS B2 AND B3)	<u>R0003</u>	30 NOV 01
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67	E3.3	ELECTRICAL DETAILS, NOTES AND SCHEDULE	<u>R0003</u>	30 NOV 01
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REVISIONS TO DRAWINGS BY NOTATION

Drawing, Sheet 13, Plate L1.1: Make the following changes:

1. Revise Note 4 to read, "Trash enclosure fence shall be 4'high. All other screen fencing shall be 6' high."
2.

Drawing, Sheet 15, Plate L2.1: Make the following changes:

1. In Details 4 through 7, provide #12 tracer wire over every irrigation pipe.

Drawing, Sheet 34, plate A6.2: In Section 5, change ""Per final soils design" to ""Refer to Soils Report for conditions."

Drawing, Sheet 38, Plate A6.3:

Drawing, Sheet 38, Plate A8.1: Make the following changes:

1. In Details 2 and 3, change "90 MPH Warranty" to "75 MPH Warranty."
2. In Detail 9, add welded wire fabric to the concrete slab, and run it under the trench drain.
3. In Detail 16,

Drawing, Sheet 61, Plate

Drawing, Sheet 67, Plate E3.3: Make the following changes to Detail 9:

1. Change "Bond ductbank ground conductor to grounding lugs" to read "Bond multi-grounded neutral conductor to grounding lug" (two places).
2. Change "Grounded/static neutral in ductbank" to read "Multi-grounded neutral in ductbank" (three places).
3. Change "Ductbank ground conductor bonded to rebar" to read "Bond rebar to ground conductor."
4. Change "Bond neutral conductor to grounding lug" to read "Bond multi-grounded neutral conductor to grounding lug."

STANDARD DETAILS BOUND IN THE SPECIFICATIONS

DRAWING NUMBER	SHEET NUMBER	TITLE	DATE
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SECTION 01501 - CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

1 & 2	U.S. Air Force Project Construction Sign	84JUN20
1	Hard Hat Sign	10SEP90

END OF SECTION

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02009/DJ

Improve Capehart Family Housing, Phase 3, Malmstrom AFB, Montana

16710 COMMUNICATIONS CIRCUITS

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APPENDIX A: INSPECTION REPORT OF ASBESTOS AND LEAD-BASED
PAINTED BUILDING MATERIALS – CAPEHART FAMILY HOUSING
IMPROVEMENTS, PHASE 3.

SECTION 01025

PAYMENT

PART 1 GENERAL

1.1 GENERAL

The contract price for each item shall constitute full compensation for furnishing all plant, labor, materials, appurtenances, and incidentals and performing all operations necessary to design, construct and complete the items in accordance with the contract documents. Payment for each item shall be considered as full compensation, notwithstanding that minor features may not be mentioned therein. Work paid for under one item will not be paid for under any other item. No separate payment will be made for the work, services, or operations required by the Contractor, as specified in DIVISION 1, GENERAL REQUIREMENTS, to complete the project in accordance with the contract documents; all costs thereof shall be considered as incidental to the work.

[This paragraph (1.1.1) is added by Amendment R0003.]

1.1.1 Payment: The following description of the work is provided to assist the Contractor in determining the division of work between the Schedule Items addressed herein and to clarify items of work to be included in a specific item. Payment for all Schedule Items shall be made at either the contract lump sum or unit price in accordance with the Schedule.

ITEM No. 0001 – Buildings 4009 through 4016, 4029, 4030 and 4031. The following work is identified to clarify the division of work between the building interior utility systems (paid for in this Item) and the site utility work paid for in Item 0002 and to further clarify work included in this Item.

Gas System: The building interior gas distribution system is to be extended to the Anodeless Service Riser adjacent the foundation. The individual housing unit regulators and associated valves are included in this Item. (See Detail 4 on Plate M2.2.)

Domestic Water System: The building interior Water Service is to be extended to the existing 1 inch water line located approximately five feet from the housing unit. (See Domestic Water Riser Diagram on Plate M2.8.)

Storm Drainage System: Install new sumps, footing drain tie-ins, new pumps and associated pump discharge piping as shown on Detail 2, Plate M3.1 and Detail 8 on Plate C1.8. Note: While a few of the buildings have sumps either installed or partially installed. The Contractor is to provide and install new sumps and pumps for all the buildings.

Sewer System: Disconnect the existing foundation drains from the sewer service and repair the existing foundation sub drainage in accordance with Detail 8, Plate C1.8.

Electrical Service: Provide meter cabinets with main circuit breakers, feeders to interior electrical panels and all associated grounding. (See Details 5 & 6, Plate E3.2.)

Telephone/CATV: Extend interior communications wiring systems to the service providers device boxes located on the building exterior. (See Details 1 & 3, Plate E3.3.)

Water Heaters: Provide new high recovery gas water heaters with a minimum 40 gallon capacity for housing units type B1 and B2, and minimum 50 gallon capacity for housing units type A3 and B3. Water heaters shall meet ASHRAE 90A Standard. Provide new pressure/temperature relief valves and drains for all water heaters. Removal and disposal of existing water heaters is included in this Item.

ITEM No. 0002 –Site Utilities “Base Item”. The following work is identified to clarify the division of work between the site utility systems (paid for in this Item) and the building interior utility systems paid for in other Schedule Items, and to further clarify the extent of the site utility work included in this Item.

Gas Distribution System: Provide Anodeless Service Risers and all associated exterior gas distribution for Buildings 4009 through 4016, 4029, 4030, 4031 (Base Item No. 0001 buildings) and Buildings 4017 through 4021 and 4028. At Base Item 0001 buildings, connect the gas distribution system to the housing unit regulators (provided in Base Item 0001) (see Detail 4, Plate M2.2.) At Buildings 4017 through 4021 and 4028 provide Anodeless Service Risers adjacent the building foundations and cap the risers.

Note: This Item includes the regulator station and connection to the existing 6 inch gas main (see Plate C1/7). Demolition of the existing Gas Distribution System serving the Base Item No. 0001 buildings is included in this Item. However, the existing gas service to Buildings 4017 through 4021 and 4028 is to remain in service. Demolition of the Gas Distribution system serving other than Base Item No. 0001 buildings shall be included in the work for the individual buildings (see Schedule Item Nos. 0004, 0005 and 0006.)

Storm Drainage System: Provide site Storm Drainage A, B, C, E and F (as shown on Plate C2.4) including Service Risers for all Base Item No. 0001 Buildings and for Buildings 4017 through 4021 and 4028 and connection to the existing 36” Storm Drain with MH # 8. For the Base Item No. 0001 Buildings connect the sump pump discharge piping to the service risers, for Buildings 4017 through 4021 and 4028 cap the riser inlets.

Electrical Service: For Base Item No. 0001 Buildings provide connections to meter cabinets at buildings and all associated site underground electrical distribution equipment and wiring. Included in this work is the removal and reconnection of service connections to Buildings 4007 and 4008 as shown on the Electrical Site Plan Plate E1.2.

For Buildings 4017 through 4021 provide conduit stub outs from the underground ducts to serve each unit. Provide caps and locating markers for all stub outs. The work

includes providing all sectionalizers and transformers to provide service to these buildings. The extension of the conduit systems and associated wiring to these buildings will be paid for under other schedule items.

For Building 4028 provide underground service connection with meters and main breakers (field locate on the outside of the building). The existing interior electrical panels are rated for 100 amp. (prior to renovation) therefore, the extension of service from the main breakers and associated interior wiring shall be sized accordingly. The removal of existing weatherheads, above ground service wiring and roof repairs are to be included in this item.

Demolition of the overhead utility lines and poles serving the Base Item No. 0001 Buildings and Buildings 4007, 4008, and 4028 is included in this Item. (See Plate E1.1.)

Telephone/CATV: For Base Item No. 0001 Buildings and Buildings 4028, 4007 and 4008 provide conduit stub ups at buildings and all associated site communications distribution system conduits. At Buildings 4028, 4007 and 4008 the conduit stub ups are to be field located to facilitate connection to the existing communications service. Coordinate with QWest and AT&T Broadband for installation of communications services. Contractor is to provide an allowance of **\$20,000.00** in the price for this Item to cover provider charges for the exterior communications system demolition and new wiring installation and service connections.

For Buildings 4017 through 4021 provide conduit stub outs from the underground ducts for communications service to each unit. Provide caps and locating markers for all stub outs. The work includes providing all distribution conduits and stub ups for the communications provider pedestals associated with these buildings. The extension of the conduit systems and associated wiring to these buildings will be paid for under other schedule items.

ITEM No. 0003– Site Utilities “Option Item.” The following work is identified to clarify the division of work between the site utility systems (paid for in this Item) and the building interior utility systems paid for in other Schedule Items, and to further clarify the site utility work included in this Item. **Note:** This Item will complete the underground site utility distribution work except as specified to provide final service connections. The connection of the Electrical Service and Telephone/CATV to the following buildings extends these services to make the buildings fully functional without being renovated. However, it is the intent of the Government to renovate as many of the buildings as possible with the funds available (see Schedule Item Nos. 0004, 0005 and 0006.)

Gas Distribution System: Provide Anodeless Service Risers and all associated exterior gas distribution for Buildings 4022 through 4027. Provide caped risers adjacent the building foundations. **Note:** The existing gas service to these buildings is to remain in service. Demolition of the Gas Distribution system serving these buildings will be included in the work for the individual buildings (see Schedule Item Nos. 0004, 0005 and 0006.)

Storm Drainage System: Provide site Storm Drainage D (as shown on Plate C1.4) including Service Risers for Buildings 4022 through 4027 and connection to existing 48" Storm Drain with MH # 11. Cap the riser inlets at building service risers.

Electrical Service and Telephone/CATV: Buildings 4023, 4024, 4026, and 4027 have these underground services in place. The relocation of these underground services for Building 4022 are included in Schedule Item 0005 and for Building 4025 are included in Schedule Item 0004.

For Electrical Service to Buildings 4017 through 4021 complete the conduit systems from the conduit stub outs provided in Schedule Item No. 0002, and provide meters and 100 amp. breakers (field locate on the outside of the building). The existing interior electrical panels are rated for 100 amp. (prior to renovation) therefore, the extension of service from the main breakers and associated interior wiring shall be sized accordingly. The removal of existing weatherheads, above ground service wiring and roof repairs are to be included in this item.

Demolition of the overhead utility lines and poles serving these Buildings is included in this Item. (See Plate E1.1.)

For Telephone/CATV Service to Buildings 4017 through 4021 complete the conduit systems, from the communication stub outs provided in Schedule Item No. 0002, to each unit. Coordinate with QWest and AT&T Broadband for installation of communications services. Contractor is to provide an allowance of **\$5,000.00** in the price for this Item to cover provider charges for the exterior communications system demolition and new wiring installation and connection of services.

ITEM No. 0004– Building 4025. The following work is identified to clarify the division of work between the building interior utility system (paid for in this Item) and the site utility work and to further clarify work included in this Item.

Gas System: The building interior gas distribution system is to be extended and connected to the gas distribution system Anodeless Service Riser adjacent the foundation (provided in Item No. 0003). The individual housing unit regulators and associated valves are included. (See Detail 4 on Plate M2.2.) The existing gas service is to be disconnected and abandoned as specified on Plate C1.7.

Domestic Water System: The building interior Water Service is to be extended and connected to the existing 1 inch water line located approximately five feet from the housing unit. (See Domestic Water Riser Diagram on Plate M2.8.)

Storm Drainage System: Install new sumps, footing drain tie-in, new pumps and associated pump discharge piping as shown on Detail 2, Plate M3.1 and Detail 8 on Plate C1.8. Connection of the pump discharge piping to the Storm Drainage System service riser is included in this item.

Sewer System: Disconnect the existing foundation drain from the sewer service and connect existing foundation sub drainage in accordance with Detail 8, Plate C1.8.

Electrical Service: Relocate existing Meter/Main circuit breakers in accordance with Plate E4.1. Work includes providing new underground feeders to the relocated Meter boxes, feeders to new interior electrical panels and all associated grounding.

Telephone/CATV: Relocate the existing communications service equipment in accordance with Plate E1.2. Work includes relocation of existing underground communications lines and coordination with QWest and AT&T Broadband for reinstallation of communications service. Extend interior communications wiring to the service providers device box located on the building exterior. (See Details 1 & 3, Plate E3.3.) Contractor is to provide an allowance of **\$1,000.00** in the price for this Item to cover provider charges for the exterior communications system wiring installation and service connection.

Water Heaters: Provide new high recovery gas water heaters with a minimum 50 gallon capacity. Water heaters shall meet ASHRAE 90A Standard. Provide new pressure/temperature relief valves and drains for water heaters. Removal and disposal of existing water heaters is included in this Item.

ITEM No. 0005AA – Buildings 4018 and 4021. The following work is identified to clarify the division of work between the building interior utility system (paid for in this Item) and the site utility work and to further clarify work included in this Item.

Gas System: The building interior gas distribution systems are to be extended to the gas distribution system Anodeless Service Risers adjacent the foundation (provided in Item No. 0002). The individual housing unit regulators and associated valves are included. (See Detail 4 on Plate M2.2.) The existing gas services are to be disconnected and abandoned as specified on Plate C1.7.

Domestic Water System: The interior water service lines are to be extended and connected to the existing 1 inch water lines located approximately five feet from the housing units. (See Domestic Water Riser Diagram on Plate M2.8.)

Storm Drainage System: In all units Install new sumps, footing drain tie-ins, new pumps and associated pump discharge piping as shown on Detail 2, Plate M3.1 and Detail 8 on Plate C1.8. Connection of the pump discharge piping to the Storm Drainage System service riser is included in this item.

Sewer System: Disconnect the existing foundation drains from the sewer service and connect existing foundation sub drainage in accordance with Detail 8, Plate C1.8.

Electrical Service: For Buildings 4018 and 4021 provide meter cabinets with main circuit breakers, feeders to interior electrical panels, all associated grounding and service

connections. (See Details 5 and 6, Plate E3.2.) For these buildings the Contractor is to price the difference in cost associated with providing the 100 amp. service from Schedule Item No. 0003 and the 200 amp. service as shown on the drawings for the renovation.

Telephone/CATV: For Buildings 4018 and 4021 extend interior communications wiring to the service providers device box located on the building exterior. (See Details 1 & 3, Plate E3.3.) For these buildings the Contractor is to price the difference in cost associated with providing the communications service from Schedule Item No. 0003 and the service as shown on the drawings for the renovation. Coordinate with QWest and AT&T Broadband for installation of communications services. The provider charges for the exterior communications system work is to be paid for from the allowance provided in Schedule Item No. 0003.

Water Heaters: Provide new high recovery gas water heaters with a minimum 40 gallon capacity. Water heaters shall meet ASHRAE 90A Standard. Provide new pressure/temperature relief valves and drains for water heaters. Removal and disposal of existing water heaters is included in this Item.

ITEM No. 0005 AB – Building 4028. The following work is identified to clarify the division of work between the building interior utility system (paid for in this Item) and the site utility work and to further clarify work included in this Item.

Gas System: The building interior gas distribution systems are to be extended to the gas distribution system Anodeless Service Riser adjacent the foundation (provided in Item No. 0002). The individual housing unit regulators and associated valves are included. (See Detail 4 on Plate M2.2.) The existing gas service is to be disconnected and abandoned as specified on Plate C1.7.

Domestic Water System: The interior water service line is to be extended and connected to the existing 1 inch water line located approximately five feet from the building. (See Domestic Water Riser Diagram on Plate M2.8.)

Storm Drainage System: Install new sumps, footing drain tie-ins, new pumps and associated pump discharge piping as shown on Detail 2, Plate M3.1 and Detail 8 on Plate C1.8. Connection of the pump discharge piping to the Storm Drainage System service riser is included in this item.

Sewer System: Disconnect the existing foundation drains from the sewer service and connect existing foundation sub drainage in accordance with Detail 8, Plate C1.8.

Electrical Service: For Building 4028 provide meter cabinets with main circuit breakers, feeders to interior electrical panels, all associated grounding and service connections. (See Details 5 and 6, Plate E3.2.) Included in this Item for Building 4028 is the removal of the 100 amp. service provided for Building 4028 in Schedule Item No. 0002 and upgrading the service to 200 amp. as shown on the drawings.

Telephone/CATV: For Building 4028 extend interior communications wiring to the service providers device box located on the building exterior. (See Details 1 & 3, Plate E3.3.) Included in this Item for Building 4028 is the relocation (as required) of the communications service provided in Item No. 0002. Coordinate with QWest and AT&T Broadband for installation of communications services. The provider charges for the exterior communications system work is to be paid for from the allowance provided in Schedule Item No. 0002.

Water Heaters: Provide new high recovery gas water heaters with a minimum 40 gallon capacity. Water heaters shall meet ASHRAE 90A Standard. Provide new pressure/temperature relief valves and drains for water heaters. Removal and disposal of existing water heaters is included in this Item.

ITEM No. 0005AC – Buildings 4022, 4023, 4024, 4026 and 4027. The following work is identified to clarify the division of work between the building interior utility systems (paid for in this Item) and the site utility work and to further clarify work included in this Item.

Gas System: The building interior gas distribution systems are to be extended to the gas distribution system Anodeless Service Risers adjacent the foundation (provided in Item No. 0003). The individual housing unit regulators and associated valves are included. (See Detail 4 on Plate M2.2.) The existing gas services are to be disconnected and abandoned as specified on Plate C1.7.

Domestic Water System: The interior water service lines are to be extended and connected to the existing 1 inch water line located approximately five feet from the housing units. (See Domestic Water Riser Diagram on Plate M2.8.)

Storm Drainage System: Install new sumps, footing drain tie-ins, new pumps and associated pump discharge piping as shown on Detail 2, Plate M3.1 and Detail 8 on Plate C1.8. Connection of the pump discharge piping to the Storm Drainage System service riser is included in this item.

Sewer System: Disconnect the existing foundation drains from the sewer service and connect existing foundation sub drainage in accordance with Detail 8, Plate C1.8.

Electrical Service: For Buildings 4022, 4023, 4024, 4026 and 4027 provide feeders to new interior electrical panels and associated grounding. For Building 4022 the work includes, relocating one of the existing meter cabinets including its existing underground feeder in accordance with Plate E4.1.

Telephone/CATV: Extend interior communications wiring to the service providers device box located on the building exterior. (See Details 1 & 3, Plate E3.3.) For Building 4022 the work includes, relocating one of the existing communications services

including its existing underground feeders in accordance with Plate E1.2. Coordinate with QWest and AT&T Broadband for installation/connection of communications services. The provider charges for the exterior communications system work is to be paid for from the allowance provided in Schedule Item No. 0003.

Water Heaters: Provide new high recovery gas water heaters with a minimum 40 gallon capacity. Water heaters shall meet ASHRAE 90A Standard. Provide new pressure/temperature relief valves and drains for water heaters. Removal and disposal of existing water heaters is included in this Item.

ITEM No. 0006 – Buildings 4017, 4019 and 4020. The following work is identified to clarify the division of work between the building interior utility systems (paid for in this Item) and the site utility work and to further clarify work included in this Item.

Gas System: The building interior gas distribution systems are to be extended to the gas distribution system Anodeless Service Risers adjacent the foundation (provided in Item No. 0002). The individual housing unit regulators and associated valves are included. (See Detail 4 on Plate M2.2.) The existing gas services are to be disconnected and abandoned as specified on Plate C1.7.

Domestic Water System: The interior water service lines are to be extended and connected to the existing 1 inch water lines located approximately five feet from the buildings. (See Domestic Water Riser Diagram on Plate M2.8.)

Storm Drainage System: Install new sumps, footing drain tie-ins, new pumps and associated pump discharge piping as shown on Detail 2, Plate M3.1 and Detail 8 on Plate C1.8. Connection of the pump discharge piping to the Storm Drainage System service riser is included in this item.

Sewer System: Disconnect the existing foundation drains from the sewer service and connect existing foundation sub drainage in accordance with Detail 8, Plate C1.8.

Electrical Service: For provide meter cabinets with main circuit breakers, feeders to interior electrical panels, all associated grounding and service connections. (See Details 5 and 6, Plate E3.2.) For these buildings the Contractor is to price the difference in cost associated with providing the 100 amp. service from Schedule Item No. 0003 and the 200 amp. service as shown on the drawings for the renovation.

Telephone/CATV: Extend interior communications wiring to the service providers device box located on the building exterior. (See Details 1 & 3, Plate E3.3.) For these buildings the Contractor is to price the difference in cost associated with providing the communications service from Schedule Item No. 0003 and the service as shown on the drawings for the renovation. Coordinate with QWest and AT&T Broadband for installation of communications services. The provider charges for the exterior

communications system work is to be paid for from the allowance provided in Schedule Item No. 0003.

Water Heaters: Provide new high recovery gas water heaters with a minimum 40 gallon capacity. Water heaters shall meet ASHRAE 90A Standard. Provide new pressure/temperature relief valves and drains for water heaters. Removal and disposal of existing water heaters is included in this Item.

1.2 PROGRESS PAYMENT INVOICE

Requests for payment shall be submitted in accordance with Federal Acquisition Regulations (FAR) Subpart 32.9, entitled "PROMPT PAYMENT", and Paragraphs 52.232-5 and 52.232-27, entitled "Payments Under Fixed-Price Construction Contracts", and "Prompt Payment for Construction Contracts", respectively. In addition each request shall be submitted in the number of copies and to the designated billing office as shown in the Contract.

1.2.1 When submitting payment requests, the Contractor shall complete Blocks 1 through 12 of the "PROGRESS PAYMENT INVOICE" Form as directed by the Contracting Officer. (A sample form is attached at the end of this Technical Specification Section.) The completed form shall then become the cover document to which all other support data shall be attached.

1.2.2 One additional copy of the entire request for payment, to include the "PROGRESS PAYMENT INVOICE" cover document, shall be forwarded to a separate address as designated by the Contracting Officer.

1.2.3 The Contractor shall submit with each pay request, a list of subcontractors that have worked during that pay period. The listing shall be broken down into weeks, identifying each subcontractor that has worked during a particular week, and indicate the total number of employees that have worked on site for each subcontractor for each week. The prime Contractor shall also indicate the total number of employees for its on site staff for each week.

PARTS 2 and 3 NOT USED

PROGRESS PAYMENT INVOICE

See Federal Acquisition Regulations (FAR) 32.900, 52.232-5, & 52.232-27

1. PROJECT AND LOCATION	2. DATE
3. CONTRACTOR NAME AND ADDRESS (Must be the same as in the Contract)	4. CONTRACT NO. 5. INVOICE NO.
6. DESCRIPTION OF WORK	7. PERIOD OF PERFORMANCE From: To:
8. DISCOUNT TERMS	
9. OFFICIAL TO WHOM PAYMENT IS TO BE FORWARDED Name: Title: Phone: () -	10. OFFICIAL TO BE NOTIFIED OF DEFECTIVE INVOICE Name: Title: Phone () -
11. CERTIFICATION: I hereby certify, to the best of my knowledge and belief, that (1) The amounts requested are only for the performance in accordance with the specifications, terms, and conditions of this contract; (2) Payments to subcontractors and suppliers have been made from previous payments received under the contract, and timely payments will be made from the proceeds of the payment covered by this certification, in accordance with subcontract agreements and the requirements of Chapter 39 of Title 31, United States Code; and (3) This request for progress payment does not include any amounts which the prime contractor intends to withhold or retain from a subcontractor or supplier in accordance with the terms and conditions of the subcontract.	
<div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Title)</div> <div>_____ (Date)</div> </div>	
12. OTHER INFORMATION OR DOCUMENTATION required by Contract. Provide two (2) copies of each (check and attach if applicable): <input type="checkbox"/> Updated Progress Chart/Schedule <input type="checkbox"/> Progress Narrative <input type="checkbox"/> Certified Payrolls (submitted weekly) <input type="checkbox"/> Safety Exposure Report <input type="checkbox"/> Updated Submittal \register <input type="checkbox"/> Progress Photos <input type="checkbox"/> Subcontractor/Employee Listings	(FOR GOVERNMENT USE ONLY) Retainage: ____% Amt: \$_____ Withholdings: \$_____ Reason: _____ Following items are current: As-Builts <input type="checkbox"/> Yes <input type="checkbox"/> No O & M Manuals <input type="checkbox"/> Yes <input type="checkbox"/> No 1354 Data <input type="checkbox"/> Yes <input type="checkbox"/> No Submittal Register <input type="checkbox"/> Yes <input type="checkbox"/> No

END OF SECTION

SECTION 01501

CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

PART 1 GENERAL

1.1 AVAILABILITY OF UTILITY SERVICES

1.1.1 The Government will make electricity, high temperature hot water, natural gas, sewer, and potable water available to the Contractor from existing sources.

1.1.2 The Contractor, at its expense and in a workmanlike manner satisfactory to the Contracting Officer, shall install and maintain all necessary temporary connections at and from approved locations, ~~and shall install and maintain all meters required to measure the amount of electricity, water, natural gas, and high temperature hot water (HTHW) heating, used for the purpose of determining charges. The Contractor shall read these meters and shall provide meter readings to the Contracting Officer on a monthly basis. The Contracting Officer may verify these readings.~~ Before final acceptance of the work by the Government, the Contractor shall remove all the temporary connections, ~~meters~~, and associated paraphernalia in a manner satisfactory to the Contracting Officer.

1.1.3 ~~Electricity will be billed at the following rate which is the prevailing non-Government rate being charged by the Government to its on-base tenants: \$0.08421 per kWh.~~

1.1.4 ~~Water will be billed at the following rate which is the prevailing non-Government rate being charged by the Government to its on-base tenants: \$3.20261 per thousand gallons.~~

1.1.5 ~~HTHW heat will be billed at the following rate which is the prevailing non-Government rate being charged by the Government to its on-base tenants \$11.56772 per million BTU.~~

1.1.6 ~~Natural gas will be billed at the following rate which is the prevailing non-Government rate being charged by the Government to its on-base tenants \$8.16193 per MCF.~~

1.1.7 ~~The Contractor will be required to sign a resale agreement for electricity, water, HTHW heating, and natural gas used with the Base Civil Engineer. Meter readings shall be read by the Contractor and provided monthly to the 341st CES/CECC office for billing purposes.~~ The Contractor shall coordinate through the Contracting Officer to obtain permits from Base Civil Engineer for connection to utilities. Connection locations and details shall be as approved by Base Civil Engineer. Point of contact at the Base Civil Engineer is Smsgt James Cleary, telephone (406) 731- 6225.

1.2 SANITARY PROVISIONS

Contractor shall provide sanitary accommodations for the use of employees as may be necessary, shall maintain accommodations approved by the Contracting Officer, and shall comply with the requirements and regulations of the State Health Department, County Sanitarian, or other authorities having jurisdiction.

1.3 TEMPORARY ELECTRIC WIRING

1.3.1 Temporary Power and Lighting

The Contractor shall provide construction power facilities in accordance with the safety requirements of the National Electric Code NFPA No. 70 and the SAFETY AND HEALTH REQUIREMENTS MANUAL EM 385-1-1. The Contractor, or its delegated subcontractor, shall enforce the safety requirements of electrical extensions for the work of subcontractors. Work shall be accomplished by journeyman electricians.

1.3.2 Construction Equipment

In addition to the requirements of SAFETY AND HEALTH REQUIREMENTS MANUAL, EM 385-1-1, temporary wiring conductors installed for operation of construction tools and equipment shall be either Type TW or THW contained in metal raceways, or shall be hard usage or extra hard usage multiconductor cord. Temporary wiring shall be secured above the ground or floor in a workmanlike manner and shall not present an obstacle to persons or equipment. Open wiring may only be used outside of buildings, and then only in accordance with the provisions of the National Electric Code.

1.3.3 Submittals

Submit detailed drawings of temporary power connections. Drawings shall include, but not be limited to, main disconnect, grounding, service drops, service entrance conductors, feeders, GFCI'S, and all site trailer connections.

1.4 FIRE PROTECTION

During the construction period, the Contractor shall provide fire extinguishers in accordance with the safety requirements of the SAFETY AND HEALTH REQUIREMENTS MANUAL, EM 385-1-1. The Contractor shall remove the fire extinguishers at the completion of construction.

1.5 UTILITY LOCATOR/IDENTIFICATION TAPE

Unless specified otherwise elsewhere in the Contract, all installed utility lines shall have a plastic marker tape minimum 150 mm wide and 0.125 mm thick, installed 200 mm to 260 mm below grade, and brightly colored. The plastic marker tape shall include a metallic wire or metal foil backing for detection purposes, and shall bear a continuous printed inscription describing the type of utility line buried below. All underground exterior gas lines shall be provided with a continuous tracer wire (#12 wire) taped to the pipe. Utility line monument markers (concrete with brass identification plugs) shall be installed every 60 meters along straight runs and at each change of direction. Any existing marker tapes or tracer wires damaged during construction shall be repaired to original condition.

1.6 STAGING AREA

Contractor will be provided adequate open staging area adjacent to the site, as directed by the Contracting Officer. Area is unsecured, and Contractor shall make provisions for its own security.

Contractor shall be responsible for keeping staging area, and office area clean and free of weeds and uncontrolled vegetation growth. Weeds shall be removed by pulling or cutting to within 1-inch of ground level. Lawn areas shall be mown to keep growth to less than 2-inches. All loose debris and material subject to being moved by prevailing winds in the area shall be picked up or secured at all times.

Temporary storage buildings (excluding tractor trailers) sited in the area shall conform to the base color scheme (Antique Linen, Fed. No. 23578). Architectural and structural features of all temporary facilities, including tractor trailers, shall be maintained in good repair as required by the Contracting Officer. Staging area shall be enclosed by chain link fence 1.8 m high, with access gates. Spare keys to any locked gates shall be provided to the base Fire Department dispatch office. Area shall be kept clean, orderly and free of debris, demolished materials, etc. at all times. If the area is not maintained in a safe and clean condition as defined above, the Contracting Officer may direct the Contractor to perform such actions as necessary to bring the area and facilities up to base standards at no additional cost to the Government, or have the area cleaned by others with the costs being deducted from the Contractor's payment.

1.7 HOUSEKEEPING AND CLEANUP

Pursuant to the requirements of Clause CLEANING UP and Clause ACCIDENT PREVENTION, of the CONTRACT CLAUSES, the Contractor shall assign sufficient personnel to insure compliance. The Contractor shall submit a detailed written plan for implementation of this requirement. The plan will be presented as part of the pre-construction safety plan and will provide for keeping the total construction site, structures, and access ways free of debris and obstructions at all times. Work will not be allowed in those areas that, in the opinion of the Contracting Officer, have unsatisfactory cleanup and housekeeping at the end of the preceding day's normal work shift. At least once each day all areas shall be checked by the Quality Control person of the Contractor and the findings recorded on the Quality Control Daily Report. In addition, the Quality Control person shall take immediate action to insure compliance with this requirement. Housekeeping and cleanup shall be assigned by the Contractor to specific personnel. The name(s) of the personnel shall be available at the project site.

1.8 CONSTRUCTION NEAR COMMUNICATIONS CABLES

1.8.1 Excavation Near Communication Cables

Digging within 3 feet of buried communication cables (including fiber optic cables), electrical cables, and natural gas lines shall be performed by hand digging until the utility is exposed. The Project Inspector shall be notified 3 days prior to digging within a 3-foot area near this utility. A representative from Communications (Telco) must be present during excavation of Communications Cables. The cable piping routes must be marked prior to excavation in the area. A work clearance permit (AF Form 103) must be obtained from Base Civil Engineer Construction Management prior to any excavation work. Information on location of existing utilities will be available with the permit. Air Force personnel will locate the utilities only one time for digging permit purposes. It is the Contractor's responsibility from then on, through acceptance of the project. The Contractor shall be held responsible for any damage to the utility by excavation procedures. Once the utility is exposed, mechanical excavation may be used if there is no chance of damage occurring to the cable or piping systems.

1.8.2 Reburial of Exposed Utilities

When existing utility lines are reburied, a tape, detectable by pipe detector systems, shall be installed above the uncovered length of the utility. See paragraph UTILITY LOCATOR/IDENTIFICATION TAPE above for specific tape requirements.

1.8.3 Access to Communications Manhole or Handhole

No communications manhole or handhole shall be entered without first obtaining a fiber optic cable briefing. Coordinate through the Contracting Officer with the Base Communications Officer.

1.8.4 Cable Cuts or Damage

If a communications cable is cut or damaged the Contractor shall immediately notify the Contracting Officer (CO) and begin gathering personnel and equipment necessary to repair the cut, or damage. Contractor shall begin repairs within one hour of the cut or damage, unless notified otherwise, and continue repairs without interruption until full service is restored.

1.9 PROJECT SIGN

Contractor shall furnish and install 1 project sign in accordance with conditions hereinafter specified and layout shown on drawing No. 49s-40-05-15, Sheets 1 and 2, except Corps of Engineers' castle and Department of Air Force seal will be Government furnished. All letters shall be block type, upper case. Letters shall be painted as indicated using exterior-type paint. Sign shall be maintained in excellent condition throughout the life of job. Project sign shall be located as directed. Upon completion of project, sign shall be removed and shall remain the property of Contractor.

1.10 ELEVATED WORK AREAS

Workers in elevated work areas in excess of 6 feet above an adjoining surface require special safety attention. In addition to the provisions of SAFETY AND HEALTH REQUIREMENTS MANUAL, EM 385-1-1, the following safety measures are required to be submitted to the Contracting Officer's Representative. Prior to commencement of work in elevated work areas, the Contractor shall submit drawings depicting all provisions of his positive fall protection system including, but not limited to, all details of guardrails. Positive protection for workmen engaged in the installation of structural steel and steel joist shall be provided by safety nets, tie-offs, hydraulic man lifts, scaffolds, or other required means. Decking crews must be tied-off or work over nets or platforms not over 6 feet below the work area. Walking on beams and/or girders and the climbing of columns is prohibited without positive protection. Perimeter guardrails shall be installed at floor, roof, or wall openings more than 6 feet above an adjoining surface and on roof perimeters. Rails shall be designed to protect all phases of elevated work including, but not limited to, roofing operations and installation of gutters and flashing. Rails around roofs may not be removed until all work on the roof is complete and all traffic on or across the roof ceases. Rails shall be designed by a licensed engineer to provide adequate stability under any anticipated impact loading. As a minimum, the rails shall consist of a top rail at a height of 1 meter, a mid-rail, and a toe board. Use of tie-offs, hydraulic man lifts, scaffolds, or other means of roof edge protection methods may be utilized on small structures such as family housing, prefabricated metal buildings, etc. If safety belts and harnesses are used, the

positive fall protection plan will address fall restraint versus fall arrest. Body belts will ONLY be used for fall restraint, they will not be used for fall arrest.

1.11 CONCEALED WORK

All items of work to be concealed shall be Government inspected prior to concealment.

1.12 REPAIR OF ROAD CUTS

Asphaltic surface shall be completely in place within 48 hours after placement of base gravel. Between placement of base gravel and pavement, road shall be kept in driveable and passable condition.

1.13 CONSTRUCTION PLANNING MEETINGS

Contractor shall attend a weekly scheduling meeting with the Contracting Officer's Representative and a representative of the using service. During the meeting, the Contractor shall be required to present in writing, and discuss his specific construction plans for, the following 2-week period. The first week's schedule shall be firm and the second weeks' schedule may be tentative and subject to change as conditions warrant. The schedule shall be detailed describing planned work activities, crew sizes and locations, and any utility and access restrictions to base activity which may be caused by planned construction. Any scheduling of outages will be performed at this meeting. Any Contractor activity affecting base security needs, such as scattered crews and number of workers per crew, will be detailed in the written schedule and discussed during the meeting. This weekly meeting is in addition to the construction progress charts or network analysis submission requirements.

1.14 TRAFFIC CONTROL PLAN

The Contractor shall submit a Traffic Control Plan for moving traffic through and around the construction zone in a manner that is conducive to the safety of motorists, pedestrians, and workers. This plan shall indicate scheduling, placement, and maintenance of traffic control devices in accordance with the U.S. Department of Transportation, Federal Highway Administration publication, Manual on Uniform Traffic Control Devices.

1.14.1 Government Approval

The Contractor shall obtain, in writing, from the Base Civil Engineer's Traffic Engineer, through the Contracting Officer, approval of the Traffic Control Plan. The Contractor shall submit the Traffic Control Plan at least 15 working days prior to commencement of street or road work. Streets (except dead end) may be closed to traffic temporarily (except at least one access lane shall be kept open to traffic) by approved written request to the Contracting Officer at least 10 working days prior to street closure. Excavations shall not remain open for more than 1 working day without approval.

1.14.2 Related Requirements

Refer to Section 01005 SITE SPECIFIC SUPPLEMENTARY REQUIREMENTS paragraph 1.8 for additional traffic control measures.

1.15 UTILITIES NOT SHOWN

The Contractor can expect to encounter, within the construction limits of the entire project, utilities not shown on the drawings and not visible as to the date of this contract. The Contractor shall scan the construction site with electromagnetic or sonic equipment, and mark the surface of the ground where existing utilities are discovered. The Contractor shall verify the elevations of existing utilities, piping and any type of underground obstruction not indicated, or indicated and not specified to be removed. If such utilities interfere with construction operations, he shall immediately notify the Contracting Officer verbally and then in writing to enable a determination by the Contracting Officer as to the necessity for removal or relocation. If such utilities are removed or relocated as directed, the Contractor shall be entitled to equitable adjustment for any additional work or delay. The types of utilities the Contractor may encounter are waterlines, sewer lines (storm and sanitary), gas lines, fueling lines, steam lines, buried fuel tanks, septic tanks, other buried tanks, communication lines, cathodic protection cabling, and power lines. These utilities may be active or abandoned utilities.

1.16 GOVERNMENT WITNESSING AND SCHEDULING OF TESTING

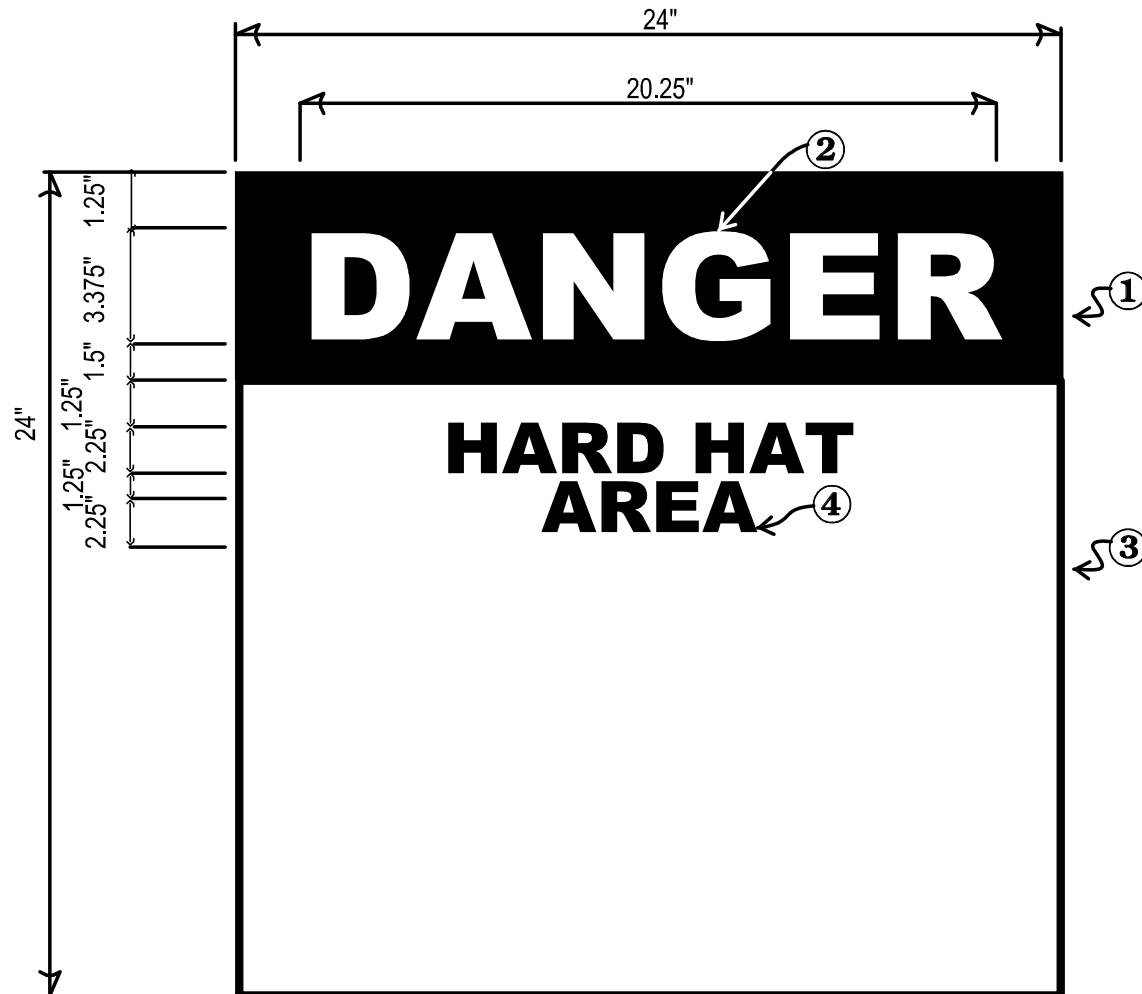
The Contractor shall notify the Contracting Officer, by serial letter, of dates and agenda of all performance testing of the following systems: mechanical (including fire protection and EMCS) and electrical (including fire protection), a minimum of 10 calendar days prior to start of such testing. In this notification, the Contractor shall certify that all equipment, materials, and personnel necessary to conduct such testing will be available on the scheduled date and that the systems have been prechecked by him and are ready for performance and/or acceptance testing. Contractor shall also confirm that all operations and maintenance manuals have been submitted and approved. NO PERFORMANCE AND/OR ACCEPTANCE TESTING WILL BE PERMITTED UNTIL THE OPERATIONS AND MAINTENANCE MANUALS HAVE BEEN APPROVED.

Government personnel, at the option of the Government, will travel to the site to witness testing. If the testing must be postponed or canceled for whatever reason not the fault of the government, the Contractor shall provide the Government not less than 3 working days advance notice (notice may be faxed) of this postponement or cancellation. Should this 3 working day notice not be given, the Contractor shall reimburse the Government for any and all out of pocket expenses incurred for making arrangements to witness such testing including, but not limited to airline, rental car, meal, and lodging expenses. Should testing be conducted, but fail and have to be rescheduled for any reason not the fault of the Government, the Contractor shall similarly reimburse the Government for all expenses incurred.

1.17 HARD HAT SIGNS

The Contractor shall provide 24 x 24 inch square Hard Hat Area signs at each entry to the project or work area as directed by the Contracting Officer. A minimum of two signs will be required. Signs shall be in accordance with the sketch at the end of this section.

PART 2 PRODUCTS AND PART 3 EXECUTION (NOT APPLICABLE)



?? SIGN SHALL BE FABRICATED FROM .125 THICK 6061-T6 ALUMINUM PANEL

?? COLOR

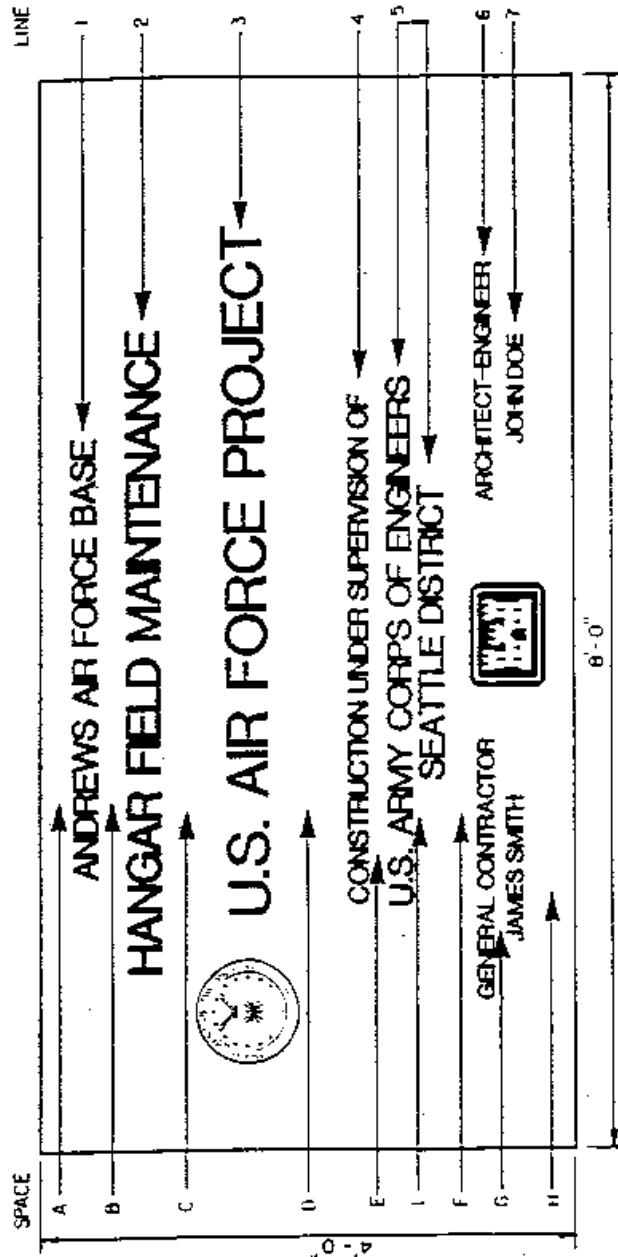
1. SAFETY RED (SR)
2. WHITE
3. WHITE
4. BLACK

?? LETTERING SHALL BE HELVETICA BOLD TYPOGRAPHY.

?? LETTERS AND BACKGROUND SHALL BE REFLECTIVE SHEETING MATERIAL.

?? SIGNS SHALL BE POSTED AT 6'-6" (BOTTOM SIGN TO GRADE) OR AS DIRECTED BY THE CONTRACTING OFFICER.

?? LETTERING TO BE CENTERED ON PANEL.



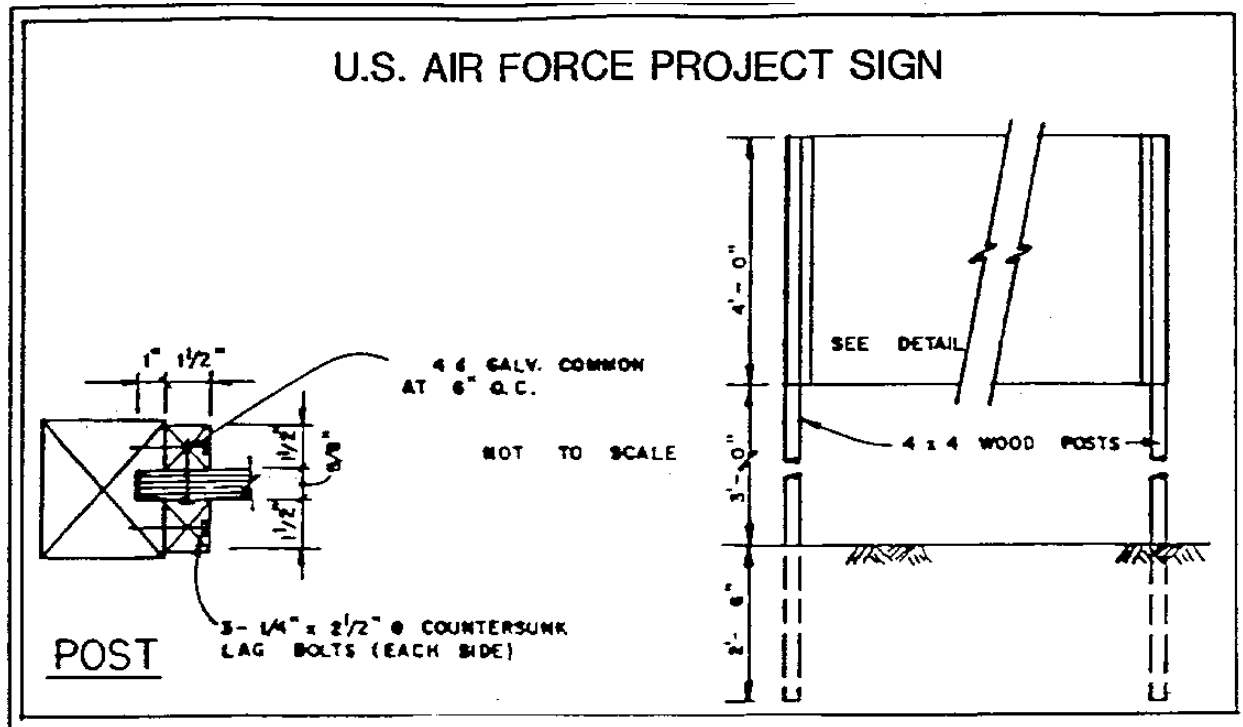
SAMPLE CONSTRUCTION SIGN FOR MCP PROJECTS

SCHEDULE

SPACE	HT.	LINE	DESCRIPTION	LETTER	STROKE
					HT.
A	2"	1	LOCATION	2	3/8" 1/4"
B	2 5/8"	2	PROJECT NOMENCLATURE *	2	3/4" 3/8"
C	5 3/4"	3	U.S. AIR FORCE PROJECT	4	1/2"
D	6"	4	CONSTRUCTION UNDER SUPERVISION OF	1 1/2"	1/8"
E	4"	5	CONSTRUCTION AGENCY *	2	3/8" 1/4"
F	4"	6	GENERAL CONTRACTOR *	1	3/8" 3/16"
G	1"	7	GENERAL CONTRACTOR	1	3/8" 3/16"
H	2 7/8"		* WILL VARY TO SUIT PROJECT REQUIREMENTS		
I	2"		SEATTLE DISTRICT		

U.S. AIR FORCE
 PROJECT
 CONSTRUCTION SIGN

Sheet 1 of 2
 U.S. Army Corps of Engineers, Seattle, WA.
 Pre-Submitted with Report
 Tri A.L.N. DATE: 20 JUNE 84
 Cdr A.L.N. File No. 438 / 40-05-10



NOTES:

1. Signboard 4' x 8' x 5/8" grade A-C exterior type plywood with medium density overlay on both sides.
2. Paint both sides and edges with one prime coat and two coats of paint, accordance with FED. STD. 595b, color number brown 30118 exterior type enamel. Lettering shall be as shown on drawing and shall be antique linen 33578 gloss exterior type enamel.
3. Lettering shall be Helvetica medium.
4. Acceptable abbreviations may be used for Contractor's name.
5. Department of Air Force Seal and Corps of Engineers' Castle to be Government furnished.
6. No company logo shall be used.
7. Sign posts and 1 1/2" wood trim shall be stained dark brown.
8. Upon completion of work under this contract, the project sign shall be removed from the job site and shall remain the property of the Contractor.

SHEET 2 OF 2

END OF SECTION

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SECTION 02055 - SELECTIVE DEMOLITION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract apply to this section.

1.2 SUMMARY

- A. This Section requires the selective removal and subsequent offsite disposal of the following:

1. Portions of existing buildings indicated on drawings and as required to accommodate new construction.
2. Removal and protection of existing fixtures, materials, and equipment items indicated to be reused.
3. Relocation of pipes, conduits, ducts, and other mechanical and electrical work as per the project requirements.
4. Site improvements, including site utilities.

- B. Removal work specified elsewhere:

1. See Division 2 Section 02150 "Site Clearing" for site clearing and removal of above- and below-grade improvements not part of building demolition.
2. Cutting floors and walls for piping, ducts, and conduits is included with the work of the respective mechanical and electrical specification sections in Divisions 15 and 16.
3. Cutting holes in roof for installation of new rooftop mechanical equipment is specified in Division 15.
4. Remodeling construction work and patching are included within the respective sections of specifications, including removal of materials for reuse and incorporation into remodeling or new construction.

1.3 SUBMITTALS

- A. General

1. Submit the following in accordance with Provisions of Contract and Division 1 Specification Sections.
2. Schedule indicating proposed sequence of operations for selective demolition work to Contracting Officer for review prior to start of work. Include coordination for shutoff, capping, and continuation of utility services as required, together with details for dust and noise control protection.
3. Provide detailed sequence of demolition and removal work to ensure uninterrupted progress of Government's on-site operations.

-
4. Coordinate with Government's continuing occupation of portions of existing building and with Government's partial occupancy of completed new addition.
-
- B. Photographs of existing condition of structure surfaces, equipment, and adjacent improvements that might be misconstrued as damage related to removal operations. File with Contracting Officer prior to start of work.

1.4 JOB CONDITIONS

-
- A. Occupancy: Government will occupy portions of the building immediately adjacent to areas of selective demolition. Conduct selective demolition work in manner that will minimize need for disruption of Government's normal operations. Provide minimum of 72 hours advance notice to Government of demolition activities that will affect Government's normal operations.
- B. Conditions of Structures: Government assumes no responsibility for actual condition of items or structures to be demolished.
1. Conditions existing at time of inspection for bidding purposes will be maintained by Government insofar as practicable. However, minor variations within structure may occur by Government's removal and salvage operations prior to start of selective demolition work.
-
- C. Partial Demolition and Removal: Items indicated to be removed but of salvageable value to Contractor may be removed from structure as work progresses. Transport salvaged items from site as they are removed.
-
1. Storage or sale of removed items on site will not be permitted.
-
- D. Protections: Provide temporary barricades and other forms of protection to protect Government's personnel and general public from injury due to selective demolition work.
1. Provide protective measures as required to provide free and safe passage of Government's personnel and general public to occupied portions of building.
 2. Erect temporary covered passageways as required by authorities having jurisdiction.
 3. Provide interior and exterior shoring, bracing, or support to prevent movement, settlement, or collapse of structure or element to be demolished and adjacent facilities or work to remain.
 4. Protect from damage existing finish work that is to remain in place and becomes exposed during demolition operations.
 5. Protect floors with suitable coverings when necessary.
 6. Construct temporary insulated coverings when necessary.
 7. Construct temporary insulated dustproof partitions where required to separate areas where noisy extensive dirt or dust operations are performed. Equip partitions with dustproof doors and security locks.
 8. Provide temporary weather protection during interval between demolition and removal of existing construction on exterior surfaces and installation of new construction to ensure that no water leakage or damage occur to structure or interior areas of existing building.
 9. Remove protections at completion of work.
-
- E. Damages: Promptly repair damages caused to adjacent facilities by demolition work.

-
- F. Traffic: Conduct selective demolition operations and debris removal to ensure minimum interference with road, streets, walks, and other adjacent occupied or used facilities.
-
1. Do not close, block, or otherwise obstruct streets, walks, or other occupied or used facilities without written permission from authorities having jurisdiction. Provide alternate routes around closed or obstructed traffic ways if required by governing regulations.
-
- G. Flame Cutting: Do not use cutting torches for removal until work area is cleared of flammable materials. At concealed spaces, such as interior of ducts and pipe spaces, verify condition of hidden space before starting flame-cutting operations. Maintain portable fire suppression devices during flame-cutting operations.
-
- H. Utility Services: Maintain existing utilities indicated to remain in service and protect them against damage during demolition operations.
-
1. Do not interrupt utilities serving occupied or used facilities, except when authorized in writing by authorities having jurisdiction. Provide temporary services during interruptions to existing utilities, as acceptable to governing authorities.
 2. Maintain fire protection services during selective demolition operations.
-
- I. Environmental Controls: Use water sprinkling, temporary enclosures, and other methods to limit dust and dirt migration. Comply with governing regulation pertaining to environmental protection.
-
1. Do not use water when it may create hazardous or objectionable conditions such as ice, flooding and pollution.
-

PART 2 – PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.1 PREPARATION

-
- A. General: Provide interior and exterior shoring, bracing, or support to prevent movement, settlement, or collapse of areas to be demolished and adjacent facilities to remain.
-
1. Cease operations and notify Contracting Officer immediately if safety of structure appears to be endangered. Take precautions to support structure until determination is made for continuing operations.
 2. Cover and protect furniture, equipment, and fixtures from soilage or damage when demolition work is performed in areas where such items have not been removed.
 3. Erect and maintain dust-proof partitions and closures as required to prevent spread of dust or fumes to occupied portions of the building.

 - a. Where selective demolition occurs immediately adjacent to occupied portions of the building, construct dust-proof partitions of minimum 4-inch studs, 5/8-inch drywall (joints taped) on occupied side, 1/2-inch fire-retardant plywood on demolition side. Fill partition cavity with sound-deadening insulation.
 - b. Provide weatherproof closure for exterior openings resulting from demolition work.
 4. Locate, identify, stub off, and disconnect utility services that are not indicated to remain.
-

-
- a. Provide bypass connections as necessary to maintain continuity of service to occupied areas of building. Provide minimum of 72 hours advance notice to Government if shutdown of service is necessary during changeover.
-

3.2 PROTECTION

- A. Existing Facilities: Protect adjacent walkways, loading docks, building entries, and other building facilities during demolition operations.
- B. Existing Items to Remain: Protect construction indicated to remain against damage and soiling during demolition. When permitted by Contracting Officer, items may be removed to a suitable, protected storage location during demolition and cleaned and reinstalled in their original locations after demolition operations are complete.
- C. Existing Utilities: Maintain utility services indicated to remain and protect them against damage during demolition operations.
 - 1. Do not interrupt existing utilities serving adjacent occupied or operating facilities unless authorized in writing by Owner and authorities having jurisdiction.
 - 2. Provide temporary services during interruptions to existing utilities, as acceptable to Owner and to authorities having jurisdiction.
 - a. Provide at least 72 hours' notice to Owner if shutdown of service is required during changeover.
- D. Temporary Protection: Erect temporary protection, such as walks, fences, railings, canopies, and covered passageways, where required by authorities having jurisdiction and as indicated. Comply with requirements in Division 1 Section "Temporary Facilities and Controls."
 - 1. Protect existing site improvements, appurtenances, and landscaping to remain.
 - 2. Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.
 - 3. Provide protection to ensure safe passage of people around building demolition area and to and from occupied portions of adjacent buildings and structures.
 - 4. Protect walls, windows, roofs, and other adjacent exterior construction that are to remain and that are exposed to building demolition operations.

3.3 DEMOLITION

- A. General: Perform selective demolition work in a systematic manner. Use such methods as required to complete work indicated on Drawings in accordance with demolition schedule and governing regulations.
 - 1. Demolish concrete and masonry in small sections. Cut concrete and masonry at junctures with construction to remain using power-driven masonry saw or hand tools; do not use power-driven impact tools.
 - 2. Locate demolition equipment throughout structure and promptly remove debris to avoid imposing excessive loads on supporting walls, floors, or framing.

3. Provide services for effective air and water pollution controls as required by local authorities having jurisdiction.
 4. Demolish foundation walls to a depth of not less than 12 inches below existing ground surface. Demolish and remove below-grade wood or metal construction. Break up below-grade concrete slabs.
 5. For interior slabs on grade, use removal methods that will not crack or structurally disturb adjacent slabs or partitions. Use power saw where possible.
 6. Completely fill below-grade areas and voids resulting from demolition work. Provide fill consisting of approved earth, gravel, or sand, free of trash and debris, stones over 6 inches in diameter, roots, or other organic matter.
 7. Remove existing gypsum board from interior surfaces of walls and ceilings to facilitate installation of new electrical systems, insulation and other work indicated.
 8. Remove existing deteriorated sub-flooring materials to sound material and remove existing plywood floors in all kitchens and all baths. Leave straight and square cuts at structural supports. Replace with new material to match elevation of adjacent existing flooring.
 9. If unanticipated mechanical, electrical, or structural elements that conflict with intended function or design are encountered, investigate and measure both nature and extent of the conflict. Submit report to Contracting Officer in written, accurate detail. Pending receipt of directive from Contracting Officer, rearrange selective demolition schedule as necessary to continue overall job progress without undue delay.
- B. Existing Utilities: Abandon existing utilities and below-grade utility structures. Cut utilities flush with grade.
- C. Existing Utilities: Demolish existing utilities and below-grade utility structures that are within 5 feet outside of footprint indicated for new construction. Abandon utilities outside this area.
1. Fill abandoned utility structures with satisfactory soil materials according to backfill requirements in Division 2 Section "Earthwork."

~~3.4 — SALVAGED MATERIALS~~

~~A. Salvaged Items: Where indicated on Drawings as "Salvage - Deliver to Government," carefully remove indicated items, clean, store, and turn over to Government and obtain receipt.~~

~~1. Historic artifacts, including cornerstones and their contents, commemorative plaques and tablets, antiques, and other articles of historic significance, remain property of Government. Notify Contracting Officer if such items are encountered and obtain acceptance regarding methods of removal and salvage for Government.~~

~~2. Carefully remove, clean, and deliver to government the following items:~~

~~Appliance~~

3.5 DISPOSAL OF DEMOLISHED MATERIALS

- A. Remove from building site debris, rubbish, and other materials resulting from demolition operations. Transport and legally dispose off site.
1. If hazardous materials are encountered during demolition operations, comply with applicable regulations, laws, and ordinances concerning removal, handling, and protection against exposure or environmental pollution.
 2. Burning of removed materials is not permitted on project site.

3.6 CLEANUP AND REPAIR

-
- A. General: Upon completion of demolition work, remove tools, equipment, and demolished materials from site. Remove protections and leave interior areas broom clean.
-
1. Repair demolition performed in excess of that required. Return elements of construction and surfaces to remain to condition existing prior to start operations. Repair adjacent construction or surfaces soiled or damaged by selective demolition work.
-
- B. Below-Grade Areas: Rough grade below-grade areas ready for further excavation or new construction.
- C. Below-Grade Areas: Completely fill below-grade areas and voids resulting from building demolition operations with satisfactory soil materials according to backfill requirements in Division 2 Section 02300 "Earthwork."
- D. Site Grading: Uniformly rough grade area of demolished construction to a smooth surface, free from irregular surface changes. Provide a smooth transition between adjacent existing grades and new grades.
- E. General: Promptly repair damage to adjacent construction caused by building demolition operations.
- F. Where repairs to existing surfaces are required, patch to produce surfaces suitable for new materials.
- G. Restore exposed finishes of patched areas and extend restoration into adjoining construction in a manner that eliminates evidence of patching and refinishing.
-

END OF SECTION 02055

SECTION 02553-NEW SITE NATURAL GAS DISTRIBUTION

GENERAL

1.1 SUMMARY

-
- A. System shall be in accordance with State Codes and NFPA Standard No. 54.
- B. Installation and materials shall also be in accordance with American Gas Association recommendations and the local utility regulations.
-

1.2 SUBMITTAL DATA

-
- A. See Division 1 Sections for general submittal requirements.
- B. Provide submittal data for any materials or equipment specified in this Section and any special or additional data as requested by the Contracting Officer.
-

1.3 REFERENCE STANDARDS

-
- A. The current publications listed below form a part of this specification.
1. American Society for Testing and Materials. (ASTM)
 2. D2513 Rev C90 Specification for thermoplastic Gas Pressure Pipe, Tubing & Fittings D3350-84 Polyethylene Plastics pipe and Fittings Materials.
 3. American National Standards Institute, Inc. (ANSIO)
 4. 2223.1 National Fuel Gas Code-NFPA54, 1999 Edition 831.8-89 Gas Transmission and Distribution Piping Systems
 5. American Society of Mechanical Engineers (ASME)
 6. 831.8-89 and 831.8A-1990 Gas Transmission Distribution Systems
 7. American Gas Association (AGS)
 8. ANSI2223.1-1999 National fuel Gas code-NFPA 54, 1999 Edition
 9. Title 49 Code of Federal Regulations, Part 192 Plastic Pipe Manual for Gas Service
-

1.4 SUBMITTALS

-
- A. The Contractor shall submit manufacturer's literature on piping, valves, valve boxes, fittings, pressure regulators, rollout diaphragm, service risers, warning tape and tracer wire.
-

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 GENERAL DISCRIPTION OF THE WORK

- A. The work to be performed under this Contract consists of furnishing all materials, equipment tools and labor, the performance of all necessary installation and utilities construction complete, including all work appurtenant thereto. The work includes the replacement of existing steel gas mains and services with new thermoplastic gas pressure pipe. The gas lines to be replaces are four and six inches in diameter. The service branch lines to be replaced are one inch in diameter. The mains to be replaces are located in the On-Base Capehart Housing area. New polyethylene isolation valves and valve boxes will be installed where required. New service lines, risers, regulators and appurtenances will be installed for all housing units serviced by the replacement mains. Work will be accomplished complete including trenching, backfill, surface restoration, and all incidental work.

3.2 GENERAL REQUIREMENTS

- A. The general requirements are general in scope and may refer to conditions not encountered on the work covered by this Contract. The design of the new gas Service shall be performed by a licensed engineer that is normally engaged in this area of engineering and the design shall comply with all state and federal codes governing the design and installation of gas service. All areas of work not covered specifically under this statement of work, but are required, are the responsibility of the engineer to determine the required action. All general provisions stated in the basic scope of work for this contract are applicable to this work.

3.3 QUALITY OF MATERIALS AND EQUIPMENT

- A. All products used on the effort shall be submitted to the Contracting Officer for approval.

3.4 GAS LINE LOCATIONS AND LAYOUT

- A. Contractor shall verify the locations of existing gas mains and services prior to the laying out the location of the replacement mains and services. It is the Government's preference to have gas lines located behind the units wherever possible. New gas mains shall not parallel existing sanitary sewers any closer than 10 feet, nor any other existing utilities any closer than five feet. New gas mains and services shall be located as to avoid existing trees, power poles, fences, patios, and other obstructions as approved. Service entrance to housing units shall be from the back of the unit. Connections in the housing units shall be relocated to a location that can be serviced by the new entry point.

3.5 NATURAL GAS OUTAGES

- A. The work shall be performed in such a manner as to ensure that no building, in surrounding housing areas, shall be without service for more that 2 hours. Each new main line section shall be installed, tested, and installed with gas and then its corresponding service line tapped into place. The Contractor shall schedule gas outages 10 days in advance. The Contractor shall be responsible for turning off the pilot lights before gas service is cut off to a building. Houses have pilot light for both the oven and water heater. For units that are not in this contract. but will be effected by this work, the contractor must contact occupants and enter both units to relight them within 15 minutes of resumption of gas service to the building. No building shall be without gas service beyond base working hours (0745-1615).

3.6 NATURAL GAS PIPING ABANDONMENT

- A. Existing gas piping to be abandoned in place shall be properly purged and capped. Locations of all gas piping to be abandoned in place shall be accurately shown on project as-built drawings. All caps installed on abandoned mains shall be shown on the plans with two field dimensions to fixed points. The design of this work shall include the necessary connections to maintain gas service to all other buildings that are not on this line.

3.7 PROTECTION AND MAINTENACE OF PROPERTY

- A. The Contractor shall brace, support, shore, support and maintain all underground pipes, conduits, drains and other underground construction uncovered or otherwise affected by the construction work performed under this scope of work. All trees, driveways, surfacing, pavements, curbs, mailboxes, fences, walks, buildings, utility poles, guy wires, and other surface structures affected by or obstructing construction operations in connection with the performance of the Contract, shall be restored to their original condition as determined by the Contracting Office. All replacements shall made with new materials.
- B. The Contactor shall be responsible for all damage to the streets, driveways, lawns, trees, landscaping raids, highways,, shoulders, ditches, embankments, culverts, bridges, or other property or facility, regardless of the location or character, which may be caused by moving, hauling, or otherwise transportation of equipment, material, or men to and from the work or any part of the site thereof, whether by him or his subcontractors. The Contractor shall make satisfactory and acceptable arrangements with the Contracting Officer for repair, replacement, or payments of costs incurred in connection with the said damages.

3.8 TRAFFIC CONTROL

- A. The Contractor shall schedule his operations in a manner which will assure that:
1. The safety and convenience of the motorists and pedestrians, and the safety of the construction workers are adequately met at all times.
 2. The progress of the project is completed in a manner most beneficial to the project as a whole.
 3. All signing and stripping shall conform to the standards set forth in the Manual of Uniform Traffic Control Devices (MUTCD), 1978. Signs shall be maintained in a readable condition and shall be removed immediately after the work is completed.
- B. The Contractor shall notify the Contracting Officer of proposed road closures in his Traffic Control Plan. The Contracting Officer's designed representative will then notify emergency services of the road closure. All roads, which are closed to traffic, shall be protected by effective barricades on which shall be placed working warning lights accepted to the Project Inspector. All open trenches and other excavation shall be provided with suitable barriers, signs, and lights to the extent that adequate protection is provided to the public. Obstructions such as material piles and equipment shall be provided with similar warning signs and lights. All barricades and obstructions shall be illuminated by means of working warning lights from sunset to sunrise. The work at times shall be conducted as to cause minimum obstruction and inconvenience to Base traffic and emergency vehicles.

3.9 TESTS

- A. The Contractor shall provide all laboratory and field tests required to insure compliance with design, codes, and sound engineering practices by performing:

1. Standard Proctor/Moisture/Density curves for all subgrade and backfill Materials encountered and all aggregate base course materials.
 2. Field Density Testing for trench backfill and subgrade, minimum of 2 passing tests for the lower backfill lifts, and a minimum of 2 passing tests for the upper back fill lifts at each open cut concrete pavement crossing. A minimum of test is required per 500 LF of trench outside roadway crossings.
 3. Field Density Testing for Aggregate Base Course, minimum of 1 passing test for each lift of gravel at each asphalt or concrete pavement crossing.
 4. Gradation, abrasion, and fracture tests for aggregate.
 5. All job mix formulas for concrete pavement.
 6. Concrete air, slump tests and cylinder breaks (one set for each day's production).
 7. Gas line pressure tests.
 8. Tracer Wire/Cathodic Protection System testing.
-
- B. All laboratory and material test submittals shall be approved by the Contracting Officer before placement of any paving materials.
- C. The Contractor will hire an independent testing laboratory for providing nuclear testing for field densities of trench backfill, subgrade gravel and aggregate base course.
- D. Materials, compaction, densities or other construction items, which do not meet the requirements of these specifications, shall be replaced and tested at the Contractor's expense.
- E. The Government Project Inspector shall observe all tests. For tests of long duration , The Government Project Inspector has the option of observing only certain phases of the test.

3.10 STREET CROSSING AND TRENCH RESTORATIONS

- A. The Contractor shall make every effort to return streets and other construction areas to regular use as rapidly as possible. Trenches left open over night shall be secured with continuous snow fencing and flashing barricades. The open trenches shall also be bermed when necessary to prevent storm water intrusion. At no time shall the trenching operation be more than 300 feet ahead of pipe laying operations. Following the completion of backfill and compaction operation the ground surface shall be restored. All roadways and driveways shall be kept assessable except during pipe laying and backfill operations.

3.11 CONNECTION WITH EXISTING PIPELINES

- A. Where connections are made between existing work and new pipelines, such connection shall be made in a thorough and workmanlike manner and to the satisfaction of the Contracting Officer. Each connection with an existing pipeline shall be made at a time and under conditions which will least interfere with service to area gas users. Under no circumstances shall a gas user be left out of services for over 2 hours.
- B. Existing tracer/cathodic protection wires on connecting mains shall be reconnected to the new mains and wires. Existing anode beds shall also be reconnected to the new tracer wires.

3.12 RELOCATING AND REMOVING CONFLICTING ITEMS

- A. The Contractor will be responsible for relocating, removing, avoiding or replacing signs, power poles, guy wires, fences, swing sets, dog houses or any other item in conflict with the construction. All items shall be restored to their original condition or better.

3.13 TEMPORARY FENCING

- A. Many of the housing units involved in the project have fences that will require dismantling and resetting during the course of the project. The Contractor shall erect "temporary fencing" for housing units whose occupants require that their fences be re-established overnight. Otherwise, fences shall be reset within 4 hours after the conflicting main or service is installed. The contracting Officer shall approve the use of temporary fencing. Temporary fencing shall be capable of restraining large or small dogs to their designated yards. Fences shall withstand the impact of a jumping 75-pound dog.

3.14 EXPLORATORY EXCAVATION

- A. Exploratory excavation will only be utilized at the discretion of the Contracting Officer's designated representative. In general, exploratory excavation is only intended for use at certain crossings where the actual field location of a utility is uncertain within plus or minus 3 feet on either side of the marked location, and the Contractor will therefore be required to spend an unusually long period uncovering the line. Otherwise, time spent uncovering marked utilities will be considered incidental Work.

3.15 WELDING

- A. Mitering of pipe for changes in direction are not permitted. Branches shall be taken off using welded tees, not by notching or burning hole in main. Weld-O-Lets may be utilized for small connections where approved by the Contracting Officer.
- B. All welds shall be cleaned and given one coat of black, rust-inhibiting paints and protected with PVC tape.
- C. An ASME certified welder holding a current certificate should do welding.
-

1.163.16 MATERIALS

A. POLYETHYLENE PIPE

1. All plastic pipe installed on the project shall be polyethylene pipe conforming to ASTM Specification D2513 and shall meet all tests and requirements of PE 2306 material. All piping shall be SDR II or 11.5.

B. STEEL PIPE

1. All steel pipe installed on the project shall be X-Tru or equal coated schedule 40 black steel pipe conforming to the minimum requirements of API SPEC 5 L-91 Specifications for steel pipe line. After installation, pipe exposed above The ground shall be painted Dark Brown Fed No. 10118 Fed Color Standard 595A. All steel pipe underground shall have a protective bituminous coating.

C. FITTINGS

1. Fittings shall be polyethylene for fusion welding and of the same pressure rating and material as the plastic pipes.

D. VALVES AND VALVE BOXES

1. Maintenance free plastic isolation valves shall be installed. Plastic valves shall be Kerotest, Rockwell, Perfection or equal valves.
2. Valve boxes shall be adjustable height cast iron boxes with lockable cast iron covers marked "GAS". Cover shall be painted bright yellow.

E. GAS REGULATOR STATION VALVES

1. Lockable iron or steel isolation valves shall be installed. The valve shall meet D.O.T./CFR Title 49 Part 192 and SSTM B 16.33. The valves shall have a working pressure of 175-psig minimum. Locking features shall be provided on all valves. Valves shall be Kerotest, Rockwell, Perfection or equal valves.

F. REGULATORS

1. Gas service regulators shall be spring operated with internal relief valves. New regulators shall be Fisher or approved equal. Regulators shall have cast iron casing with Class 125 Flat-faced bodies. Seat ring, metal seat parts and other major metal internal parts shall be brass or stainless steel.
2. Gas regulator station regulators shall be spring operated with internal relief valves. New regulators shall be EQIMETER or approved equal sized as required. Regulators shall have ductile/iron cast body. Orifice, stems and seat parts shall be brass or stainless steel. Molded soft seats shall be polyurethane.

G. PRESSURE RELIEF VALVE

1. Gas regulator station safety pressure relief valve shall be spring operated with internal relief valves. New safety relief valve shall be EQUIMETER Model 257 S Safety Relief Valve or approved equal and shall be sized as required. The safety relief valve shall have cast iron body. Valve stem and bushing shall be stainless steel.

H. ANODELESS SERVICE RISER

1. Anodeless service risers shall be Uponor Aldyl or approved equal and shall have integral stainless steel tracer wire connectors. Anodeless service risers shall meet applicable DOT requirements and shall be C.S.A. approved and IAMPO listed. Risers shall have threaded or slip-on moisture seals and no loose parts. Risers shall have thin film epoxy coating and individual serializations of each riser.

I. PLASTIC MARKING TAPE

1. Plastic marking tape shall be acid and alkali-resistant polyethylene film, 6 inches wide with a minimum overall thickness of 5.0 mils and shall include a solid aluminum core. Tape color shall be yellow and shall bear a continuous printed inscription describing specific utility.

J. TRACER WIRE/STRUCTURE LEAD

1. Tracer wire shall be Type CP-HMWPE # 14 stranded copper wire.

~~K. VINYL FENCE~~

- ~~1. The work covered by this section shall consist of furnishing and installing vinyl fence products for the utility enclosure. The vinyl fence materials shall be constructed with materials made of rigid Polyvinyl Chloride (PVC) formulated to resist impact and for ultra-violet~~

~~(UV) stabilization. The extruded products shall meet or exceed ASTM D1784. The manufacturer shall be Buff Tech Inc. or approved equal. Steel reinforcement shall be provided in all members. Gate material shall be steel reinforced. All vinyl materials shall have self-extinguishing fire resistant capabilities. The fence material shall be beige in color. The hardware materials used to mount fencing materials to columns, shall be stainless steel. Hinges shall be self-closing and adjustable to relieve sag or misalignment.~~

3.17 WARNING TAPE

- A. A plastic warning tape shall be installed 18" below ground surface above all new piping except at street and patio crossings. Provide multi-ply tape consisting of solid aluminum foil core between 2 types of plastic.

3.18 TRACER/CATHODIC PROTECTION TESTING

- A. All items installed under this section shall be inspected by the Project Inspector along with a member of the Base cathodic protection shop and/or the Base Plumbing shop before it is concealed and before it is backfilled. The contractor shall Notify the Project Inspector at least 24 hours in advance of any concealment as discussed above. Readings shall be made of the system at every riser and a written report of test results shall be submitted within 3 days after completing the test.

3.19 SODDING

- A. Includes all work necessary for the landscaping and sodding of lawn and landscaped areas disturbed by construction. The work shall consist of ground surface preparation and finish grading, furnishing and placing topsoil, furnishing, applying, and incorporation fertilizer into the soil, resodding, cleanup, and watering. Sodding shall be provided in those areas that are covered with lawn grass, disturbed by the Work, or as directed by the Contracting Officer.

END OF SECTION 02553

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SECTION 02871 – PRIVACY FENCING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Privacy Vinyl fencing

1.3 SUBMITTALS

- A. General: Submit each item in this Article according to the Conditions of the Contract and Division 1 Specification Sections.

1.4 QUALITY ASSURANCE

- A. Extruded rigid polyvinyl chloride (PVC) material to comply with the following:
 - 1. ASTM D792 Specific gravity.
 - 2. ASTM D256 Izod impact
 - 3. ASTM D638 Tensile properties
 - 4. ASTM D648 Deflection temperature
 - 5. ASTM D1784 Cell classification
 - 6. ASTM C94 Ready mixed concrete

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
 - 1. Outdoor Technologies Inc.
 - 2. Veka Innovations
 - 3. UltraGuard, A division of Alside, Inc.
 - 4. Or equal

- B. MATERIAL

- 1. Post, rail (Galvanized Steel reinforcement) and picket profiles to be made of an extruded rigid polyvinyl chloride (PVC).
 - 2. Color to be selected from manufacturers' full product range by Contracting Officer.
 - 3. Gates: Powder-coated metal frame with vinyl fence panels attached.
 - a. Fill gate post with concrete and provide min. (2) # 4 re-bars, or as required by manufacturers.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. Discard units of material with defects that impair quality of fence and that are too small to use with minimum number of joints or optimum joint arrangement.
- B. Set fence to required levels and lines, with members plumb, true to line, cut, and fitted.
- C. Fit fence to other construction; scribe and cope as required for accurate fit.
- D. Select fasteners of size that will not fully penetrate members where opposite side will be exposed to view or will receive finish materials. Make tight connections between members.
- E. Install at locations as indicated on drawings.

END OF SECTION 02871

SECTION 02930 – LAWNS AND GRASSES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. All turf areas within project boundaries shall be sodded, hydroseeded or reconditioned.
- B. This Section includes the following:
 - 1. Fine grading and preparing lawn areas.
 - 2. Furnishing and applying new topsoil.
 - 3. Furnishing and applying soil amendments.
 - 4. Furnishing and applying fertilizers.
 - 5. Hydroseeding new lawns.
 - 6. Sodding new lawns.
 - 7. Reconditioning existing lawn areas.
 - 8. Replanting unsatisfactory or damaged lawns.
- C. Related Sections: The following Sections contain requirements that relate to this Section:
 - 1. Division 2 Section 02150 "Clearing and Grubbing" for protection of existing trees and planting, site clearing.
 - 2. Division 2 Section 02202 "Site Grading and Excavation" for excavation, filling, rough grading, and subsurface aggregate drainage backfill.

1.3 SUBMITTAL

- A. General: Submit each item in this Article according to the Conditions of the Contract and Division 1 Specification Sections.
- B. Product data for the following:
 - 1. Fertilizers:
- C. Certification of grass seed from seed vendor for each grass-seed mixture stating the botanical and common name and percentage by weight of each species and variety, and percentage of purity, germination, and weed seed. Include the year of production and date of packaging.
 - 1. Certification of each seed mixture for sod, identifying sod source, including name and telephone number of supplier.
- D. Certification by product manufacturer that the following products supplied comply with requirements:
 - 1. Fertilizers:
- E. Qualification data for firms and persons specified in the "Quality Assurance" Article to demonstrate their capabilities and experience. Include lists of completed projects with project names and addresses, names and address of architects and owners, and other information specified.

- F. Material test reports from qualified independent testing agency indicating and interpreting test results relative to compliance of the following materials with requirements indicated
 - 1. Analysis of imported topsoil.
- G. Planting schedule indicating anticipated dates and locations for each type of planting.
- H. Maintenance instructions recommending procedures to be established by Government for maintenance of landscaping during an entire year. Submit before expiration of required maintenance periods.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: Engage an experienced Installer who has completed landscaping work similar in material, design, and extent to that indicated for this Project and with a record of successful grass establishment.
 - 1. Installer's Field Supervision: Require Installer to maintain an experienced full-time supervisor on the Project site during times that grass planting is in progress.
- B. Topsoil Analysis: Furnish a soil analysis made by a qualified independent soil-testing agency stating percentages of organic matter, inorganic matter (silt, clay, and sand), deleterious material, pH, and mineral and plant-nutrient content of topsoil.
 - 1. Report suitability of topsoil for lawn growth. State recommended quantities of nitrogen, phosphorus, and potash nutrients and soil amendments to be added to produce a satisfactory topsoil.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Seed: Deliver seed in original sealed, labeled, and undamaged containers.
- B. Sod: Harvest, deliver, store, and handle sod according to the requirements of the American Sod Producers Association's (ASPA) "Specifications for Turfgrass Sod Materials and Transplanting/Installing."

1.6 COORDINATION AND SCHEDULING

- A. Planting Season: Sow lawn seed and install sod during normal planting seasons for type of lawn work required. Correlate planting with specified maintenance periods to provide required maintenance from date of Substantial Completion.
- B. Weather Limitations: Proceed with planting only when existing and forecast weather conditions are suitable for work.

1.7 MAINTENANCE

- A. Begin maintenance of lawns immediately after each area is planted and continue until acceptable lawn is established, but for not less than the following periods:
 - 1. Seeded Lawns: 60 days after date of Substantial Completion.
 - a. When full maintenance period has not elapsed before end of planting season, or if lawn is not fully established at that time, continue maintenance during next planting season.
 - 2. Sodded Lawns: 30 days after date of Substantial Completion.

- B. Maintain and establish lawns by watering, fertilizing, weeding, mowing, trimming, replanting, and other operations. Roll, regrade, and replant bare or eroded areas and remulch to produce a uniformly smooth lawn.
 - 1. Replant bare areas with same materials specified for lawns.
 - 2. Add new mulch in areas where mulch has been disturbed by wind or maintenance operations sufficiently to nullify its purpose. Anchor as required to prevent displacement.
- C. Watering: Provide and maintain temporary piping, hoses, and lawn-watering equipment to convey water from sources and to keep lawns uniformly moist to a depth of 4 inches.
 - 1. Lay out temporary lawn-watering system and arrange watering schedule to prevent wilting, puddling, erosion, and displacement of seed or mulch. Lay out temporary watering system to avoid walking over muddy or newly seeded areas.
 - 2. Water lawn at the minimum rate of 1 inch per week.
- D. Mow lawns as soon as there is enough top growth to cut with mower set at specified height for principal species planted. Repeat mowing as required to maintain specified height without cutting more than 40 percent of the grass height. Remove no more than 40 percent of grass-leaf growth in initial or subsequent mowings. Do not delay mowing until grass blades bend over and become matted. Do not mow when grass is wet. Schedule initial and subsequent mowings to maintain following grass height:
 - 1. Mow grass 3 inches high.
- E. Postfertilization: Apply fertilizer to lawn after first mowing and when grass is dry.
 - 1. Use a slow release fertilizer that will provide actual nitrogen at 1 lb per 1000 sq. ft. of lawn area.

2.1 SEED

- A. Grass Seed: Fresh, clean, dry, new-crop seed complying with the Association of Official Seed Analysts' "Rules for Testing Seeds" for purity and germination tolerances.
 - 1. Seed Mixture: Provide - Kentucky bluegrass [mixture of 3 adapted varieties] 75%. Other seed types, adapted fine fescues and perennial ryegrass' 25%.

2.2 SOD

- A. Sod: Certified turfgrass sod complying with ASPA specifications for machine-cut thickness, size, strength, moisture content, and mowed height, and free of weeds and undesirable native grasses. Provide viable sod of uniform density, color, and texture consisting primarily of locally adapted Kentucky bluegrass varieties, strongly rooted, and capable of vigorous growth and development when planted.

2.3 TOPSOIL

- A. Topsoil: ASTM D 5268, pH range of 5.5 to 7, 4 percent organic material minimum, free of stones 1 inch or larger in any dimension, and other extraneous materials harmful to plant growth.
- B. Topsoil Source: Import topsoil from off-site sources. Obtain topsoil from naturally well-drained sites where topsoil occurs at least 4 inches deep; do not obtain from bogs or marshes.

2.4 SOIL AMENDMENTS

- A. Provide soil amendments based on recommendations from the soils test including, but not limited to the following:
- B. Sand: Clean, washed, natural or manufactured sand, free of toxic materials.
- C. Perlite: Horticultural perlite, soil amendment grade.
- D. Peat Humus: Finely divided or granular texture, with a pH range of 6 to 7.5, composed of partially decomposed moss peat (other than sphagnum), peat humus, or reed-sedge peat.
- E. Sawdust or Ground-Bark Humus: Decomposed, nitrogen-treated, of uniform texture, free of chips, stones, sticks, soil, or toxic materials.
 - 1. When site treated, mix with at least 0.15 lb. of ammonium nitrate or 0.25 lb of ammonium sulfate per cu. ft. of loose sawdust or ground bark.
- F. Manure: Well-rotted, unleached stable or cattle manure containing not more than 25 percent by volume of straw, sawdust, or other bedding materials; free of toxic substances, stones, sticks, soil, weed seed, and material harmful to plant growth.
- G. Herbicides: EPA registered and approved, of type recommended by manufacturer.
- H. Water: Potable.

2.5 FERTILIZER

- A. Commercial Fertilizer: Commercial-grade complete fertilizer of neutral character, consisting of fast- and slow-release nitrogen, 50 percent derived from natural organic sources of urea-form, phosphorous, and potassium in the following composition:
- B. When used as a soil amendment, revise fertilizer mix to remedy deficiencies found in soil tests.
- C. Composition: commercial grade fertilizer with a ratio of 1:4:1 of nitrogen, phosphorus and potassium. Provide 1 pound actual nitrogen per 1000 square feet of soil surface.
- D. Postfertilization - Slow-Release Fertilizer: Granular fertilizer consisting of 50 percent water-insoluble nitrogen, phosphorus, and potassium in the following composition:

2.6 2.06 MULCHES

- ~~A. Peat Mulch: Provide peat moss in natural, shredded, or granulated form, of fine texture, with a pH range of 4 to 6 and a water-absorbing capacity of 1100 to 2000 percent.~~
- B.A. Fiber Mulch: Biodegradable dyed-wood cellulose-fiber mulch, nontoxic, free of plant growth- or germination-inhibitors, with maximum moisture content of 15 percent and a pH range of 4.5 to 6.5.
- C.B. Nonasphaltic Tackifier: Colloidal tackifier recommended by fiber-mulch manufacturer for slurry application, nontoxic and free of plant growth- or germination-inhibitors.

2.7 EROSION-CONTROL MATERIALS

- A. Blankets: Biodegradable wood excelsior, straw, or coconut-fiber mat enclosed in a photodegradable plastic mesh. Include manufacturer's recommended steel wire staples, 6 inches long.
- B. Fiber Mesh: Biodegradable twisted jute or spun-coir mesh, 0.92 lb per sq. yd. minimum, with 50 to 65 percent open area. Include manufacturer's recommended steel wire staples, 6 inches long.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas to receive lawns and grass for compliance with requirements and for conditions affecting performance of work of this Section. Do not proceed with installation until unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Protect structures, utilities, sidewalks, pavements, and other facilities, trees, shrubs, and plantings from damage caused by planting operations.
 - 1. Protect adjacent and adjoining areas from hydroseed overspraying.
- B. Provide erosion-control measures to prevent erosion or displacement of soils and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways.

3.3 PLANTING SOIL PREPARATION

- A. Limit subgrade preparation to areas that will be planted in the immediate future. Excavated areas or areas where trees and shrubs have been removed will have soil compacted ~~to reduce slump~~ match adjacent undisturbed grades.
- B. Loosen subgrade to a minimum depth of 4 inches. Remove stones larger than 2 inches in any dimension and sticks, roots, rubbish, and other extraneous matter.
 - 1. Areas within a 20 foot diameter of the playground perimeters shall have the following special soil treatment prior to sod laying:
 - a. This area is to then be prepared as following and sodded immediately.
 - b. Two inches well rotted manure shall be spread upon the soil surface then immediately tilled into the top 6 inches of soil.
 - c. Manure is to be transported into the area only at time of spreading and tilling and is not to be stockpiled on Government property.
 - d. This area is not to be left unattended at any time before sodding and no unauthorized persons are to be allowed in the area.
 - e. Any leftover or scattered manure is to be cleaned up and removed before the end of the days work.
- C. Mix soil amendments and commercial fertilizer with topsoil at rates indicated. Delay mixing fertilizer if planting does not follow placing of planting soil within a few days. Either mix soil before spreading or apply soil amendments on surface of spread topsoil and mix thoroughly into top 4 inches of topsoil before planting.

- D. Spread topsoil to 12" compacted depth and graded required to meet thickness, grades, and elevations shown, after light rolling and natural settlement. Do not spread if planting soil or subgrade is frozen.
 - 1. Place approximately 1/2 the thickness of topsoil mixture required. Work into top of loosened subgrade to create a transition layer and then place remainder of planting soil mixture.
 - 2. Allow for sod thickness in areas to be sodded.
- E. Preparation of Unchanged Grades: Where lawns are to be planted in areas unaltered or undisturbed by excavating, grading, or surface soil stripping operations, prepare soil as follows:
 - 1. Remove and dispose of existing grass, vegetation, and turf. Do not turn over into soil being prepared for lawns.
 - 2. Till surface soil to a depth of at least 6 inches. Apply required commercial fertilizers and mix thoroughly into top 4 inches of soil. Trim high areas and fill in depressions. Till soil to a homogenous mixture of fine texture.
 - 3. Clean surface soil of roots, plants, sod, stones, clay lumps, and other extraneous materials harmful to plant growth.
 - 4. Remove waste material, including grass, vegetation, and turf, and legally dispose of it off the Government's property.
- F. Grade lawn and grass areas to a smooth, even surface with loose, uniformly fine texture. Roll and rake, remove ridges, and fill depressions to meet finish grades. Limit fine grading to areas that can be planted in the immediate future. Remove trash, debris, stones larger than 1-1/2 inches in any dimension, and other objects that may interfere with planting or maintenance operations.
- G. Moisten prepared lawn areas before planting when soil is dry. Water thoroughly and allow surface to dry before planting. Do not create muddy soil.
- H. Restore prepared areas if eroded or otherwise disturbed after fine grading and before planting.

3.4 HYDROSEEDING NEW LAWNS

- A. Hydraulic Seeding: A hydraulic method of planting seed and distributing fertilizer will be utilized for seeding Kentucky Bluegrass seed mixture as hereinafter specified. Seed, mulch and fertilizer shall be provided by the Contractor. Equipment: Hydraulic equipment used for the application of fertilizer and seed shall be of the "Super-Hydroseeder" type, manufactured by the Finn Equipment Company, Cincinnati, Ohio, or other approved types. This equipment shall have a built-in agitation system with an operating capacity sufficient to agitate, suspend, and homogeneously mix a slurry containing fertilizer and seed solids in the quantity specified per acre. The slurry distribution lines shall be large enough to prevent stoppage. The discharge line shall be equipped with a set of hydraulic spray nozzles which will provide even distribution of the slurry on the various slopes to be seeded. The slurry tank shall have a minimum capacity of 1,000 gallons and shall be mounted on a traveling unit which may be either self-propelled or drawn with a separate unit which will place the slurry tank and spray nozzles within sufficient proximity to the areas to be seeded so as to provide uniform distribution without waste. The Contracting Officer may authorize equipment with smaller tank capacity provided that the equipment has the necessary agitation system and sufficient pump capacity to spray the slurry in a uniform coat. Application: The application of the seed-fertilizer slurry shall be made with equipment specified above and shall be accomplished immediately upon completion of the final tillage. The slurry shall be applied at the rate of 1,800 gallons of water, fertilizer, and seed per acre, and shall be sprayed over the soil in a uniform coat. Upon completion of the project, a final check of the total quantities of seed and fertilizer used will be made against the total area treated, and if the minimum rates of application have not been met, the Contracting Officer shall

require the distribution of additional quantities to make up the minimum rates of application specified. The mulch shall be applied at the rate of 1,500 pounds per acre at the same time the seed and fertilizer is applied.

3.5 SODDING NEW LAWNS

- A. Lay sod within 24 hours of stripping. Do not lay sod if dormant or if ground is frozen.
- B. Lay sod to form a solid mass with tightly fitted joints. Butt ends and sides of sod; do not stretch or overlap. Stagger sod strips or pads to offset joints in adjacent courses. Avoid damage to subgrade or sod during installation. Tamp and roll lightly to ensure contact with subgrade, eliminate air pockets, and form a smooth surface.
 - 1. Sod is not to be dumped or dropped from truck or pallet.
 - 2. Lay sod across angle of slopes exceeding 1:3.
 - 3. Anchor sod on slopes exceeding 1:6 with wood pegs spaced as recommended by sod manufacturer but not less than 2 anchors per sod strip to prevent slippage.
- C. Saturate sod with fine water spray immediately upon planting. During first week, water daily or more frequently as necessary to prevent wilting and to maintain moist soil to a minimum depth of 1-1/2 inches below the sod.

3.6 RECONDITIONING LAWNS

- A. Recondition existing lawn areas damaged by Contractor's operations, including storage of materials or equipment and movement of vehicles. Also recondition lawn areas where settlement or washouts occur or where minor regrading is required.
- B. Remove sod and vegetation from diseased or unsatisfactory lawn areas; do not bury into soil. Remove topsoil containing foreign materials resulting from Contractor's operations, including oil drippings, fuel spills, stone, gravel, and other construction materials, and replace with new topsoil.
- C. Where substantial lawn remains, mow, dethatch, core aerate, and rake. Remove weeds before seeding. Where weeds are extensive, apply selective herbicides as required. Do not use pre-emergence herbicides.
- D. Remove waste and foreign materials, including weeds, soil cores, grass, vegetation, and turf, and legally dispose of it off the Government's property.
- E. Till stripped, bare, and compacted areas thoroughly to a depth of 6 inches.
- F. Apply required commercial fertilizers and mix thoroughly into top 4 inches of soil. Provide new topsoil as required to fill low spots and meet new finish grades.
- G. Apply sod as required for new lawns.
- H. Water newly planted areas and keep moist until new grass is established.

3.7 SATISFACTORY LAWN

- A. Seeded lawns will be satisfactory provided requirements, including maintenance, have been met and a healthy, uniform, close stand of grass is established, free of weeds, bare spots exceeding 5 by 5 inches, and surface irregularities.
- B. Sodded lawns will be satisfactory provided requirements, including maintenance, have been met and healthy, well-rooted, even-colored, viable lawn is established, free of weeds, open joints, bare areas, and surface irregularities.
- C. Replant lawns that do not meet requirements and continue maintenance until lawns are satisfactory.
- D. If at any time before completion and acceptance of the entire work covered by this contract, any portion of the surface becomes gullied or otherwise damaged following seeding the affected portion shall be repaired to re-establish the condition and grade of the soil prior to seeding and shall then be reseeded as specified above.

3.8 CLEANUP AND PROTECTION

- A. Promptly remove soil and debris created by lawn work from paved areas. Clean wheels of vehicles before leaving site to avoid tracking soil onto surface of roads, walks, or other paved areas.
- B. Erect barricades and warning signs as required to protect newly planted areas from traffic. Maintain barricades throughout maintenance period until lawn is established.

END OF SECTION 02930

SECTION 02950- IRRIGATION SPRINKLER SYSTEM

PART 1 - GENERAL

1.1 DESCRIPTION

- A. The work described in this section includes the materials and equipment for the installation of the automatic sprinkler system. The sprinkler system shall be designed for air purging all pipelines less than 4 inches in diameter for winter shutdown. Smaller size distribution pipes are described in this section.

1.2 SYSTEM DESIGN

- A. An irrigation system design is provided as part of the contract document. Placement of heads shall be determined by the Contractor to achieve full even coverage including coverage around all existing obstacles and without overspray. Additional piping and sprinkler heads of the appropriate size and type shall be provided by the contractor as necessary to meet these requirements. The size of nozzles, flow rate, and trajectory shall be determined by the Contractor to achieve full and even coverage. Pressures in the water main providing water to the sprinkler piping may vary from 40 to 80 psi depending on flow and location. The location of all heads and piping must be approved by the Contracting Officer prior to installation.

1.3 WARRANTIES

- A. Manufacturer's Material Warranty: All sprinkler heads shall have a full five-year warranty from the date of original installation. All electric remote control valves shall have a full three year warranty from date of original installation. The manufacturer shall replace free of charge, parts found to be defective under normal use and service within the warranty period.
- B. Installation Warranty: The Contractor shall warranty all materials and the installation for a period of 12 months from the date of final acceptance by the Government. The Contractor shall replace at no charge to the Government all defective materials and correct all installation defects.

1.4 ACCEPTABLE MANUFACTURERS

- A. The Contractor shall base his bid utilizing sprinkler heads, zone control valve boxes, and valves manufactured as listed below. All products of manufacturer shall have all optional features and is the model specified.

1.5 SUBMITTALS

- A. Product Data Submittals: A minimum of five (5) copies of manufacturer's descriptive literature for all materials utilized in the work shall be submitted to the Contracting Officer for review and approval.
- B. Operation and Maintenance Manual: A minimum of three (3) copies of complete operating and maintenance information shall be provided for valves, and sprinkler heads. This information shall include all operating and maintenance procedures recommended by the manufacturer

including complete parts list, assembly drawings, and wiring diagrams. Information shall also contain spring startup procedures, winterization instructions, and warranty information. All copies shall be clear and legible.

1.6 OPERATOR TRAINING

- A. After the system installation is complete and the system is operable, the Contractor shall provide a minimum of 4 hours of training for the Government's operating personnel. Training shall include detailed instructions on spring start up and fall winterization features, valve and sprinkler head maintenance and repair, and irrigation controller programming and options.

1.7 AS-BUILT DRAWINGS

- A. During construction of the system the Contractor shall develop and maintain as-constructed drawings showing exact locations of piping, valves, and control cable with dimensions referencing locations to physical features observable from ground surface.

1.8 START-UP AND WINTERIZATION SERVICES

- A. The Contractor shall include as part of his work the first winterization of the system in the fall after the installation is complete and the first start-up of the system the following spring. Start-up shall be completed between April 25th and May 5th.

1.9 SYSTEM PERFORMANCE REQUIREMENTS

- A. Minimum Water Coverage: 100 percent of turf and planting areas shown on drawings. All irrigated areas within this project shall have "head to head" coverage.
- B. Minimum Water Pressure: Water pressure and flow shall be adequate to operate all components of the irrigation system so as to meet the design standards.
- C. Minimum Working Pressures: The following are minimum pressure requirements for piping, valves, and specialties, unless otherwise indicated:
 - 1. Pressure Piping: 200 psig
 - 2. Circuit Piping: 150 psig

1.10 QUALITY ASSURANCE

- A. Product Options: Other manufacturer's products with equal performance characteristics may be considered. Refer to Division 1 Section "Substitutions."
- B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction.
- C. Comply with requirements of utility supplying water and authorities having jurisdiction for preventing backflow and back siphonage.
- D. Comply with ASTM F 645, "Guide for Selection, Design, and Installation of Thermoplastic Water Pressure Piping Systems."

- E. Comply with NFPA 70, "National Electrical Code," for electrical connections between wiring and electrically operated devices.
- F. AASHTO T-89, Determining the Liquid Limit of Soils.
- G. AASHTO T-90, Determining the Plastic Limit and Plasticity Index of Soils.
- H. WW-V-54d, Valve, Gate, Bronze (125, 150, and 200 and Int. AM-1 Pound, Threaded Ends, Flanged Ends, Solder End and Brazed Ends, for Land Use).
- I. American Water Works Association (AWWA) Standards.

1.11 APPLICABLE PUBLICATIONS

- A. The publications listed below form a part of these specifications to the extent referenced. The publications are referred to in the test by the basic designation only.

AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO)

AASHTO T-89	Determining the Liquid Limit of Soils
AASHTO T-90	Determining the Plastic Limit and Plasticity Index of Soils

AMERICAN SOCIETY OF TESTING AND MATERIALS (ASTM)

ASTM D-1784	Specification for Rigid Poly (Vinyl Chloride) (PVC) Compounds and Chlorinated Poly (Vinyl Chloride) (CPVC) Compounds
ASTM D-2241	Specification for Poly (Vinyl Chloride) (PVC) Plastic Pipe (SDR-PR)
ASTM D-2467	Specification for Socket-Type Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - 1. Plastic, Automatic Control Valves:
 - a. Rain Bird Sprinkler Mfg. Corp.
 - b. Rain Bird Model PEB Series
 - ~~2. Rain Bird Model PEB Series~~
 - ~~3.2. Quick Couplers:~~
 - a. Rain Bird Sprinkler Mfg. Corp.
 - ~~4.3. Sprinklers:~~
 - a. Large area – gear drive- Rainbird Falcon, fulls and parts circle, or approved equal.
 - b. Small area – Pop-up sprays – Rainbird 1804, or approved equal.
 - ~~5.4. Hunter Industries.~~
 - ~~6.5. Rain Bird Sprinkler Mfg. Corp.~~
 - ~~7.6. Toro Co. Irrigation Div.~~
 - 8. Controllers: To be provided by Government installed by Contractor.
 - ~~a. Rain Bird Sprinkler Mfg. Corp.~~

~~9.7. ESP-SAT~~

2.2 PIPING MATERIALS

- A. Refer to Part 3 "Piping Applications" and "Valve Applications" articles for application of pipe and tube materials, joining methods, and valve applications.

2.3 PIPES AND TUBES

- A. PVC Pipe: ASTM D 1785, PVC 1120 compound, Schedules 40 and 80.

2.4 PIPE AND TUBE FITTINGS

- A. PVC Socket Fittings, Schedule 80: ASTM D 2467.
- B. PVC Threaded Fittings: ASTM D 2464.
- C. Transition Fittings: Manufactured assembly or fitting, with pressure rating at least equal to that of system and with ends compatible to piping where fitting is to be installed.

2.5 VALVES AND VALVE SPECIALTIES

- A. Plastic Diaphragm Valves: Molded-plastic body, normally closed, with manual flow adjustment, and operated by 24-V, ac solenoid.
- B. Quick-Couplers: Factory-fabricated, bronze or brass, two-piece assembly. Include coupler water-seal valve; removable upper body with spring-loaded or weighted, rubber-covered caps; hose swivel with ASME B1.20.7, ¾-11.5NH threads for garden hose on outlet; and operating key.
 - 1. Locking Top Option: Include vandal-resistant, locking feature with two matching keys.
- C. Control-Valve Boxes: 10 inch round minimum size. Valve boxes shall be plastic. The boxes shall be such lengths as will be adapted, without full extension, to the depth of cover required over the pipe at valve location. Plastic boxes shall be a standard catalog product of a manufacturer regularly engaged in the manufacture of valve boxes. Plastic boxes installed in turfed areas shall have green covers. Boxes housing control valves shall have lockable covers. Plastic shall be rigid combination of polyolefin and fibrous inorganic.

2.6 SPRINKLERS

- A. Description: Manufacturer's standard sprinklers designed for uniform coverage over entire spray area indicated, at available water pressure.
- B. Pop-up, Spray Sprinklers: Fixed pattern, with screw-type flow adjustment and stainless steel retraction spring.
- C. Pop-up, Rotary, Spray Sprinklers: Gear drive full-circle and adjustable part-circle types.

2.7 AUTOMATIC CONTROL SYSTEM

- A. Wiring: UL 493, Type UF, solid copper-conductor, insulated cable, suitable for direct burial.
 - 1. Low-Voltage, Branch-Circuit Cables: No. 14 AWG minimum, between controllers and automatic control valves and color-coded different than feeder-circuit-cable jacket color and with jackets of different colors for multiple-cable installation in same trench.
 - 2. Splicing Materials: Pressure-sensitive, thermoplastic tape; waterproof sealing packets; or other waterproof connectors.

2.8 IDENTIFICATION

- A. Refer to Division 2 Section 02201 for plastic underground warning-tape materials.
 - 1. Solid blue film with continuously printed black-letter caption, "CAUTION – WATER LINE BURIED BELOW."
 - 2. Solid blue film with metallic core and continuously printed black-letter caption, "CAUTION – WATER LINE BURIED BELOW."

2.9 GOVERNMENT PROVIDED MATERIAL

- A. Automatic Controller: Government shall provide the Eicon Automatic Controller with pedestal mount to the Contractor. Contractor will be responsible for installing the Controller as recommended by the manufacturer.

PART 3 - EXECUTION

3.1 GENERAL

- A. The Contractor shall be responsible for staking out the system and adjusting the heads and lines to provide coverage. Contractor shall furnish and install additional heads and piping if sufficient coverage is not provided.
- B. Piping smaller than 4 inches in diameter may be pulled in place. Piping pulled in place shall have a minimum cover depth of 12 inches in the vicinity of valve locations and a minimum depth of 6 inches at other locations on lateral sprinkler lines. All piping that may cut the root zones of trees shall be bored into place without excavation.
- C. In areas where trenching is required for irrigation laterals, each section of pipe in trenches shall rest on pipe bedding for the full length of its barrel, with recesses excavated to accommodate joints. PVC piping shall be surrounded and covered on all sides with 6 inches of the same bedding material as described here. The bedding shall consist of sand or other suitable granular material having a uniform gradation and a maximum plasticity of 6, as determined by AASHTO Methods T-89 and T-90.
- D. When the bottom uncovered at subgrade is soft and cannot support the pipe, a further depth and/or width shall be excavated and refilled to grade with gravel or other suitable material.
- E. Rotary stream pop-up sprinkler heads shall be set with the heads plumb and shall be carefully backfilled with backfill compacted to prevent movement. The heads shall be set approximately 1 inch above the ground surface. The heads shall be connected to the sprinkler pipe with a swing riser assembly. A male to male bushing shall be used to connect the head to the riser. All valves shall be set plumb in valve boxes. Box covers shall be secured in place by bolts.

3.2 VALVE CONTROL CABLE

- A. All control cable exposed above ground shall be placed in conduit. All underground splices shall be fully encapsulated and waterproof. Underground cable ~~can be laid in the same trench with the pipe provided the cable is laid to the side. If multiple cables are installed in a trench, the cables~~ shall be bundled together with straps at least once every 20 feet and taped to the bottom of the main line every 4 feet. A minimum of 6 24 inches of extra wire shall be provided at each valve. Provide 6 inch diameter loops in the underground cable at 100 foot intervals and at all direction changes. Cable shall have a minimum of 6 24 inches of cover.
- B. All conductors shall be checked for continuity and electrical leakage after the cable is installed and backfilled. The cable system shall be free of electrical faults and discontinuities and shall be removed and replaced if any exist. Evidence of test results shall be provided to the Government prior to final acceptance. Contractor to provide and install two Spare Conductors down each main leg of system.

3.3 FLUSHING OF SPRINKLER SYSTEMS

- A. The entire sprinkler system shall be thoroughly flushed and cleaned prior to installing nozzles and screens in sprinkler heads. Extreme care shall be taken to protect valves and sprinkler heads from plugging or damage during flushing operations.

3.4 TESTING

- A. Pipe Testing: Testing of sprinkler piping shall not be pressure tested, but any visible leaks that appear after start up shall be repaired.
- B. Performance Testing: The entire irrigation system shall be started and checked for proper performance by the Contractor. After all deficiencies have been corrected, system performance shall be demonstrated and meet the satisfaction of the Contracting Officer.

END OF SECTION 02950

SECTION 02955 – TREES AND SHRUBS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Trees.
 - 2. Shrubs.
 - 3. Topsoil and soil amendments.
 - 4. Fertilizers and mulches.
 - 5. Stakes and guys.
 - 6. Landscape edgings and weed control barriers.
- B. Related Sections: The following Sections contain requirements that relate to this Section:
 - 1. Division 2 Section 02150 "Clearing and Grubbing" for protection of existing trees and planting, and site clearing.
 - 2. Division 2 Section 02202 "Site Grading and Excavation" for excavation, filling, rough grading, and subsurface aggregate drainage and drainage backfill.

1.3 SUBMITTALS

- A. General: Submit each item in this Article according to the Conditions of the Contract and Division 1 Specification Sections.
- B. Product certificates signed by manufacturers certifying that their products comply with specified requirements.
 - 1. Manufacturer's certified analysis for standard products.
 - 2. Analysis for other materials by a recognized laboratory made according to methods established by the Association of Official Analytical Chemists, where applicable.
- C. Samples of each of the following:
 - 1. 5 lb of mineral mulch for each color and texture of stone required for Project, in labeled plastic bags.
 - 2. Edging materials and accessories to verify color selected.
- D. Qualification data for firms and persons specified in the "Quality Assurance" Article to demonstrate their capabilities and experience. Include lists of completed projects with project names and addresses, names and address of architects and owners, and other information specified.
- E. Planting schedule indicating botanical and common names, size and condition, supplier's name, address and phone numbers, anticipated dates for delivery for each type of planting.

- F. Maintenance instructions recommending procedures to be established by Contracting Officer for maintenance of landscape work during entire year. Submit before expiration of required maintenance periods.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: Engage an experienced Installer who has completed a minimum of 5 years of landscaping work similar in material, design, and extent to that indicated for this Project and with a record of successful tree and shrub establishment.
 - 1. Installer's Field Supervision: Require a minimum of 5 years in plant installation that will provide full-time supervision on the Project site during times that tree and shrub planting is in progress.
- B. Testing Agency Qualifications: To qualify for acceptance, an independent testing agency must demonstrate to Contracting Officer's representative's satisfaction, based on evaluation of agency-submitted criteria conforming to ASTM E 699, that it has the experience and capability to satisfactorily conduct the testing indicated without delaying the Work.
- C. Provide quality, size, genus, species, and variety of trees and shrubs indicated, complying with applicable requirements of ANSI Z60.1 "American Standard for Nursery Stock."
- D. Topsoil Analysis: Furnish a soil analysis made by a qualified independent soil-testing agency stating percentages of organic matter, inorganic matter (silt, clay, and sand), deleterious material, pH, and mineral and plant-nutrient content of topsoil.
 - 1. Report suitability of topsoil for growth of applicable planting material. State recommended quantities of nitrogen, phosphorus, and potash nutrients and any limestone, aluminum sulfate, or other soil amendments to be added to produce a satisfactory topsoil.
- E. Measurements: Measure trees and shrubs according to ANSI Z60.1 with branches and trunks or canes in their normal position. Do not prune to obtain required sizes. Take caliper measurements 6 inches above ground for trees up to 4-inch caliper size, and 12 inches above ground for larger sizes. Measure main body of tree or shrub for height and spread; do not measure branches or roots tip-to-tip.
- F. Observation: Contracting Officer may observe trees and at the project site before planting for compliance with requirements for genus, species, variety, size and quality. Contracting Officer retains right to observe trees and shrubs further for size and condition of balls and root systems, insects, injuries, and latent defects and to reject unsatisfactory or defective material at any time during progress of work. Remove rejected trees or shrubs immediately from Project site.
- G. Preinstallation Conference: Conduct conference at Project site to comply with requirements of Division 1 Section "Project Meetings."

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Do not prune before delivery, except as approved by Contracting Officer's representative. Protect bark, branches, and root systems from sun scald, drying, sweating, whipping, and other handling and tying damage. Do not bend or bind-tie trees or shrubs in such a manner as to destroy natural shape. Provide protective covering during delivery. Do not drop trees and shrubs during delivery.
- B. Handle balled and burlapped stock by the root ball.

- C. Deliver trees and shrubs after preparations for planting have been completed and install immediately. If planting is delayed more than 6 hours after delivery, set trees and shrubs in shade, protect from weather and mechanical damage, and keep roots moist.
 - 1. Set balled stock on ground and cover ball with soil, peat moss, sawdust, or other acceptable material.
 - 2. Do not remove container-grown stock from containers before time of planting.
 - 3. Water root systems of trees and shrubs stored on site with a fine-mist spray. Water as often as necessary to maintain root systems in a moist condition.

1.6 COORDINATION AND SCHEDULING

- A. Coordinate planting of trees and shrubs during normal planting seasons for such work in location of Project.
 - 1. Plant frost-tender trees and shrubs only after danger of frost is past or before frost season to allow establishment before first frost. Do not plant in frozen ground.
- B. Coordination with Lawns: Plant trees and shrubs after finish grades are established and before planting lawns, unless otherwise acceptable to Contracting Officer's representative.
 - 1. When planting trees and shrubs after lawns, protect lawn areas and promptly repair damage caused by planting operations.

1.7 WARRANTY

- A. General Warranty: The special warranty specified in this Article shall not deprive the Government of other rights the Government may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by the Contractor under requirements of the Contract Documents.
- B. Special Warranty: Warrant living trees and shrubs through Contract completion against defects including death and unsatisfactory growth.
- C. Remove and replace dead trees and shrubs immediately unless required to plant in the succeeding planting season.
- D. Replace trees and shrubs that are more than 25 percent dead or in an unhealthy condition at end of warranty period.
- E. A limit of one replacement of each tree and shrub will be required, except for losses or replacements due to failure to comply with requirements.

1.8 MAINTENANCE

- A. Maintain trees and shrubs by pruning, cultivating, watering, weeding, fertilizing, restoring planting saucers, tightening and repairing stakes and guy supports, and resetting to proper grades or vertical position, as required to establish healthy, viable plantings. Spray as required to keep trees and shrubs free of insects and disease. Restore or replace damaged tree wrappings. Maintain trees and shrubs for the following period:
 - 1. Maintenance Period: 2 years following Substantial Completion.

PART 2 - PRODUCTS

2.1 TREE AND SHRUB MATERIAL

- A. General: Unless otherwise indicated, furnish nursery-grown trees and shrubs conforming to ANSI Z60.1, with healthy root systems developed by transplanting or root pruning. Provide well-shaped, fully branched, healthy, vigorous stock free of disease, insects, eggs, larvae, and defects such as knots, sun scald, injuries, abrasions, and disfigurement.
- B. Grade: Provide trees and shrubs of sizes and grades conforming to ANSI Z60.1 for type of trees and shrubs required. Trees and shrubs of a larger size may be used if acceptable to Government representative, with a proportionate increase in size of roots or balls.
- C. Label each tree and shrub with securely attached, waterproof tag bearing legible designation of botanical and common name.

2.2 SHADE AND FLOWERING TREES

- A. Deciduous trees: Single-stem trees with straight trunk, well-balanced crown, and intact leader, of height and caliper indicated, conforming to ANSI Z60.1 for type of trees required. Provide single stem trees except where special forms are shown or listed.
- B. Small Trees: Small upright or spreading type, branched or pruned naturally according to species and type, and with relationship of caliper, height, and branching recommended by ANSI Z60.1. Provide single stem trees except where special forms are shown or listed.
- C. Provide balled and burlapped trees.

2.3 DECIDUOUS SHRUBS

- A. Form and Size: Deciduous shrubs with not less than the minimum number of canes required by and measured according to ANSI Z60.1 for type, shape, and height of shrub.
- B. Provide balled and burlapped deciduous shrubs.
- C. Container-grown deciduous shrubs will be acceptable in lieu of balled and burlapped deciduous shrubs subject to meeting ANSI Z60.1 limitations for container stock.

2.4 CONIFEROUS EVERGREENS

- A. Form and Size: Normal-quality, well-balanced, coniferous evergreens, of type, height, spread, and shape required, conforming to ANSI Z60.1.
- B. Provide balled and burlapped coniferous evergreens.

2.5 BALLED AND BURLAPPED STOCK

- A. Provide trees and shrubs dug with firm, natural ball of earth in which they are grown.

- B. Ball Size: Not less than diameter and depth recommended by ANSI Z60.1 for type and size of tree or shrub required. Increase ball size or modify ratio of depth to diameter to encompass enough fibrous and feeding-root system necessary for full recovery of trees and shrubs.
- C. Wrap, tie, and rigidly support earth ball as recommended by ANSI Z60.1 for size of balls required. Drum-lace balls with a diameter of 30 inches or greater.

2.6 CONTAINER-GROWN STOCK

- A. Provide healthy, vigorous, well-rooted shrubs established in container. Provide balled and burlapped stock when required shrubs exceed maximum size recommended by ANSI Z60.1 for container-grown stock.
 - 1. Established container stock is defined as a shrub transplanted into container and grown in container long enough to develop new fibrous roots, so that root mass will retain its shape and hold together when removed from container.
- B. Containers: Rigid containers that will hold ball shape and protect root mass during shipping. Provide trees and shrubs established in containers of not less than minimum sizes recommended by ANSI Z60.1 for kind, type, and size of trees and shrubs required.

2.7 TOPSOIL

- A. Topsoil: ASTM D 5268, fertile, friable, naturally loamy, pH range of 5.5 to 7, 4 percent organic material minimum, free of stones 1 inch or larger in any dimension, and other extraneous materials harmful to plant growth.
 - 1. Topsoil Source: Reuse surface soil stockpiled on the site. Verify suitability of surface soil to produce topsoil meeting requirements and amend when necessary. Supplement with imported topsoil when quantities are insufficient. Clean topsoil of roots, plants, sods, stones, clay lumps, and other extraneous materials harmful to plant growth.
 - 2. Topsoil Source: Import topsoil from off-site sources. Obtain topsoil from naturally well-drained sites where topsoil occurs at least 4 inches deep; do not obtain from bogs or marshes.

2.8 FERTILIZER

- A. Tree and shrub fertilizer: Slow release tablet form in the following composition.
 - 1. Agriform - Composition: 21 gram tablet, 20 percent total nitrogen, 10 percent phosphoric acid, 5 percent potash, 2.6 percent calcium, 1.6 percent sulfur, 0.35 percent iron.
 - 2. Or alternate approved by Contracting Officer's representative.

2.9 MULCHES

- A. Organic Mulch: Organic mulch, free from deleterious materials and suitable as a top dressing of trees and shrubs, consisting of one of the following:
 - 1. Type: ~~Wood and Douglas or Hem Fir medium shredded~~ bark chips.
- B. Mineral Mulch: Hard, durable stone, washed free of loam, sand, clay, and other foreign substances, of following type, size range, and color:
 - 1. Type: Rounded riverbed gravel or smooth-faced stone.
 - 2. ~~Type: Crushed stone or gravel.~~

~~3.2.~~ Size Range: ~~3 inch maximum~~, 1-1/2 inch ~~minimum minus~~.

~~4.3.~~ Color: Readily available natural gravel color range.

2.10 WEED-CONTROL BARRIERS

- A. Nonwoven Fabric: Polypropylene or polyester fabric, 3 oz. per sq. yd. minimum.
- B. Composite Fabric: Woven, needle-punched polypropylene substrate bonded to a nonwoven polypropylene fabric, 4.8 oz. per sq. yd.

2.11 STAKES AND GUYS

- A. Provide staking as shown in the planting details of plans.
- B. Flags: Standard surveyor's plastic flagging tape, white, 6 inches long.

2.12 LANDSCAPE EDGINGS

- A. Polyethylene Edging: Manufacturer's standard-grooved, base-black polyethylene edging, 1/10 inch thick by 5 inches deep, unless otherwise indicated, extruded in standard lengths, with 9-inch steel angle stakes.
 - 1. Top Profile: Rounded.
 - 2. Accessories: Manufacturer's standard connecting clips or plugs.

2.13 MISCELLANEOUS MATERIALS

- A. Antidesiccant: Water-insoluble emulsion, permeable moisture retarder, film forming, for trees and shrubs. Deliver in original, sealed, and fully labeled containers and mix according to manufacturer's instructions.
- B. Vitamin B1 - root stimulator
- C. Trunk-Wrap: Vinyl tree wrap, 3ft. length - Ross TreeGard or approved equal.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas to receive trees and shrubs for compliance with requirements and for conditions affecting performance of work of this Section. Do not proceed with installation until unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Lay out individual tree and shrub locations and areas for multiple plantings. Stake locations, outline areas, adjust locations when requested, and obtain Contracting Officer's acceptance of layout before planting. Make minor adjustments as may be required.

- B. Lay out trees and shrubs at locations directed by Contracting Officer's. Stake locations of individual trees and shrubs and outline areas for multiple plantings.

3.3 EXCAVATION

- A. Pits and Trenches: Excavate with vertical sides and with bottom of excavation slightly raised at center to assist drainage. Loosen hard subsoil in bottom of excavation. Scarify any hardpan on side of tree or plant hole which has been caused by digging or augering process.
- B. Balled and Burlapped Trees and Shrubs: Excavate approximately 1-1/2 times as wide as ball diameter and equal to ball depth, plus the following setting layer depth:
 - 1. Setting Layer: Allow 3 inches of planting soil.
- C. Container-Grown Shrubs: Excavate to approximately 1-1/2 times as wide as container width and equal to container depth, plus the following setting-layer depth:
 - 1. Setting Layer: Allow 3 inches of planting soil.
- D. Obstructions: Notify Contracting Officer if unexpected rock or obstructions detrimental to trees or shrubs are encountered in excavations.
- E. Fill excavations with water and allow to percolate out, before placing setting layer and positioning trees and shrubs.

3.4 PLANTING TREES AND SHRUBS

- A. Set balled and burlapped stock plumb and in center of pit or trench with top of ball raised above adjacent finish grades as indicated.
 - 1. Place stock on setting layer of compacted backfill soil.
 - 2. Remove burlap from tops of balls and partially from sides, but do not remove from under balls. Remove non-biodegradable wrapping material around root balls before setting. Do not use planting stock if ball is cracked or broken before or during planting operation.
 - 3. Backfill material will consist of the soil removed from the hole during excavation and topsoil, mixed in the ratio of 1:1. Remove any roots, plants, sod, stones larger than 3 inches, clay lumps and other extraneous materials harmful to plant growth.
 - 4. Add tree and shrub fertilizer to backfill using manufacturer's specifications.
 - 5. Place backfill around ball in layers, tamping to settle backfill and eliminate voids and air pockets. When pit is approximately 1/2 backfilled, water thoroughly before placing remainder of backfill. Apply Vitamin B-1 Root Stimulator at the rate of one tablespoon per gallon to all bare root stock plant materials. Thoroughly water each plant with a minimum of 5 gallons of the mixed B-1 solution.
 - 6. Repeat watering until no more is absorbed. Water again after placing and tamping final layer of backfill.
- B. Set container-grown stock plumb and in center of pit or trench with top of ball raised above adjacent finish grades as indicated.
 - 1. Carefully remove containers so as not to damage root balls.
 - 2. Place stock on setting layer of compacted backfill soil.
 - 3. Tease encircling roots to loosen.
 - 4. Backfill material will consist of the soil removed from the hole during excavation and topsoil, mixed in the ratio of 1:1. Remove any roots, plants, sod, stones larger than 3 inches, clay lumps and other extraneous materials harmful to plant growth.
 - 5. Add tree and shrub fertilizer to manufacturer's specifications.

6. Place backfill around ball in layers, tamping to settle backfill and eliminate voids and air pockets. When pit is approximately 1/2 backfilled, water thoroughly before placing remainder of backfill. Apply Vitamin B-1 Root Stimulator at the rate of one tablespoon per gallon to all bare root stock plant materials. Thoroughly water each plant with a minimum of 5 gallons of the mixed B-1 solution.
7. Repeat watering until no more is absorbed. Water again after placing and tamping final layer of backfill.

- C. Dish and tamp top of backfill to form a 3-inch high mound around the rim of the pit. Do not cover top of root ball with backfill.
- D. Wrap trees with trunk-wrap. Start at base of trunk and spiral cover trunk to height of first branches.

3.5 PRUNING

- A. Prune trees and shrubs only to remove broken branches or at direction of Government representative.

3.6 GUYING AND STAKING

- A. Upright staking and Tying: Stake all trees within 24 hours of planting. Use a minimum of 2 stakes of length required to penetrate at least 18 inches below bottom of backfilled excavation and to extend at least 54 inches above grade. Set vertical stakes and space to avoid penetrating balls or root masses. Support trees with 2 strands of tie wire encased in hose sections at contact points with tree trunk. Allow enough slack to avoid rigid restraint of tree. Use number of stakes as follows:
 1. ~~Two-stakes- #5 Rebar~~ for trees up to 10 feet high and 2-1/2 inches or less in caliper. Use 3 stakes for trees less than 14 feet high and up to 4-inch caliper. Space stakes equally around trees. See planting details in Landscape Plans
- B. Guying and Staking: Guy and stake all evergreen trees within 24 hours of planting, unless otherwise indicated. Securely attach no fewer than 3 guys to stakes 30 inches long, driven to grade.
 1. Attach flags to each guy wire, 30 inches above finish grade.

3.7 MULCHING

- A. Mulch backfilled surfaces of pits, trenches, and other areas indicated.
- B. Weed-Control Barriers: Install the following weed-control barriers according to manufacturer's recommendations, before mulching. Completely cover area to be mulched, lapping edges a minimum of 6 inches. No organic mulch shall be placed over weed-control barriers.
 1. Material and Seam Treatment: Nonwoven fabric with seams pinned.
 2. Material and Seam Treatment: Composite fabric with seams pinned.
- C. Organic Mulch: Apply the following average thickness of organic mulch and finish level with adjacent finish grades. Do not place mulch against trunks or stems.
 1. Thickness: 4 inches.

- D. Mineral Mulch: Apply the following average thickness of mineral mulch and finish level with adjacent finish grades. Mulch is to be the full 4inch thickness in all areas, including adjacent to drives, walkways and edgings. Do not place mulch against trunks or stems until vinyl trunk protection has been installed.
 - 1. Thickness: 4 inches.

3.8 INSTALLATION OF EDGINGS

- A. Plastic Edging: Install plastic edging where indicated according to manufacturer's recommendations. Anchor with steel stakes spaced approximately 24 inches apart, driven through upper base grooves of edging.

3.9 INSTALLATION OF MISCELLANEOUS MATERIALS

- A. Apply antidesiccant using power spray to provide an adequate film over trunks, branches, stems, twigs, and foliage.
 - 1. Apply as per manufacturer's instructions for Balled and burlapped and container stock.

3.10 CLEANUP AND PROTECTION

- A. During tree and shrub work, keep pavements clean and work area in an orderly condition.
- B. Protect trees and shrubs from damage due to landscape operations, operations by other contractors and trades, and trespassers. Maintain protection during installation and maintenance periods. Treat, repair, or replace damaged landscape work as directed.

3.11 DISPOSAL OF SURPLUS AND WASTE MATERIAL

- A. Disposal: Remove surplus soil and waste material, including excess subsoil, unsuitable soil, trash, and debris, and legally dispose of it off the Government's property.

END OF SECTION 02955

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SECTION 09680 - CARPET

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes tufted carpet and carpet cushion.

1.2 SUBMITTALS

- A. Product Data: For each product indicated.
- B. Shop Drawings: Include the following:
 - 1. Existing floor materials to be removed.
 - 2. Existing floor materials to remain.
 - 3. Seam locations.
 - 4. Pattern type, repeat, location, direction, and starting point.
 - 5. Pile direction.
 - 6. Insets and borders.
 - 7. Transition, and other accessory strips.
 - 8. Transition details to other flooring materials.
- C. Samples: For each for each carpet, cushion, and exposed accessory and for each color and pattern required.
- D. Product Schedule: Use same room and product designations indicated on Drawings and in schedules.
- E. Maintenance data.

1.3 QUALITY ASSURANCE

- A. Installer Qualifications: A qualified installer who is certified by the Floor Covering Installation Board or who can demonstrate compliance with its certification program requirements.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Comply with CRI 104, Section 5, "Storage and Handling."

1.5 PROJECT CONDITIONS

- A. General: Comply with CRI 104, Section 6.1, "Site Conditions; Temperature and Humidity."
- B. Environmental Limitations: Do not install carpet and cushion until wet work in spaces is complete and dry, and ambient temperature and humidity conditions are maintained at the levels indicated for Project when occupied for its intended use.
- C. Where demountable partitions or other items are indicated for installation on top of carpet, install carpet tile before installing these items.

1.6 WARRANTY

- A. Carpet Warranty: Manufacturer's standard form in which manufacturer agrees to replace carpet that does not comply with requirements or that fails within 2 years from date of Substantial

Completion. Warranty does not include deterioration or failure of carpet from unusual traffic, failure of substrate, vandalism, or abuse. Failures include, but are not limited to, more than 10 percent loss of face fiber, edge raveling, snags, runs, and delamination.

- B. Carpet Cushion Warranty: Manufacturer's standard form agreeing to replace carpet cushion that does not comply with requirements or that fails within 2 years from date of Substantial Completion. Warranty does not include deterioration or failure of carpet cushion from unusual traffic, failure of substrate, vandalism, or abuse. Failure includes, but is not limited to, permanent indentation or compression.

PART 2 - PRODUCTS

2.1 CARPET

~~A. Available Products: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, the following:~~

~~B.A.~~ Products: Subject to compliance with requirements, provide one of the following:

1. Carpet specifications based on Shaw; ~~Stepping Stone~~~~Highland Plush~~ or approved equal. Approved equal by Contracting Officer.
 - a. Color and Pattern: ~~As selected by Contracting Officer from manufacturer's full range.~~# 17231 "Straw".

~~B.~~ Fiber Type: 100% Eco Solution Q Nylon

~~C.~~ Average Yarn Surface Pile Weight: ~~3245~~ oz. sq. yard minimum

~~D.~~ Stitches per Inch: 13

~~E.~~ Tufted Pile Thickness: .197 inches

~~F.~~ Finished Pile Thickness: .188 inches

~~G.~~ Total Thickness: .327 inches

~~H.~~ Average Density: 6,128 oz/yd³

~~I.~~ Weight Density: 196096 sq oz/yd⁵

~~J.~~ Filament: BCF

~~K.~~ Protective Treatment: SSP Shaw Soil Protection, Florsept Antimicrobials, Antistatic

~~D.L.~~ Total Weight: ~~70~~ 4,843 oz./sq. yard for finished carpet.

~~E.M.~~ Primary Backing: Polypropylene.

~~N.~~ Secondary Backing: ~~ActionBac Polyurethane attached cushion backing~~

~~O.~~ Gauge: 1/10

~~G.P.~~ Width: 12' Broadloom

H.Q. Critical Radiant Flux Classification: Class I, not less than 0.45 w/sq. cm per ASTM E 648.

R. Flaming Mode: <450

S. Static (AATCC-134): <3.5 Kv

T. Type Static Control: Permanent Conductive Fiber

2.2 CARPET CUSHION

A. Traffic Classification: CCC Class II, heavy traffic.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Comply with CRI 104, Section 8, "Direct Glue-Down." 10, "Attached Cushion."
- B. Comply with CRI 104, Section 12, "Carpet on Stairs."
- C. Maintain uniformity of carpet direction and lay of pile. At doorways, center seams under door in closed position. Bind or seal cut edges as recommended by carpet manufacturer.
- D. Install pattern parallel to walls and borders.

END OF SECTION 09680

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SECTION 10550 - POSTAL SPECIALTIES

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes the following:

1. Neighborhood Mailboxes (NDCBU) as shown and specified.

1.2 SUBMITTALS

- A. Product Data: For each product indicated.
- B. Samples: For each exposed finish.
- C. Product certificates, including written approval by Postmaster General.
- D. Maintenance data.
- E. Other Informational Submittals: Final USPS local postmaster approval for installed postal specialties to be served by USPS.

1.3 DELIVERY, STORAGE, AND HANDLING

- A. Deliver lock keys to Contraction Officer by registered mail or overnight package service with a record of each corresponding lock and key number.

1.4 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of postal specialties that fail in materials or workmanship within 1 year from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Aluminum: Alloy and temper recommended by manufacturer for type of use and finish indicated, and as follows:
1. Sheet and Plate: ASTM B 209.
2. Extruded Shapes: ASTM B 221.
- B. Steel Sheet: Cold rolled, ASTM A 1008/A 1008M, Commercial Steel (CS), Type B.
- ~~C. Metallic-Coated Steel Sheet: Galvanized steel sheet, ASTM A 653/A 653M, G60 coating designation; or electrolytic zinc-coated steel sheet, ASTM A 591/A 591M, Class C coating.~~
- ~~D. Bituminous Paint: Cold-applied asphalt mastic complying with SSPC Paint 12, except containing no asbestos fibers.~~

2.2 ACCESSORIES

- A. Key Cabinets: ~~Wall-Pedestal~~-mounted, metallic-coated steel cabinet with pivoting, key-holding panels and side-hinged door equipped with five-pin cam type tumbler, cylinder door locks with rain/dust shield and concealed, full-length flush hinge. Finish cabinet, panels, and door with baked-enamel finish. Provide key control system consisting of key-holding hooks, labels, two sets of key tags with self-locking key holders, key-gathering envelopes, and temporary and permanent markers.
 - 1. Cross-Index System: Consisting of index cards for recording key information. Include three receipt forms for each key-holding hook.

2.3 FABRICATION

- A. Preassemble postal specialties in shop to greatest extent possible to minimize field assembly. Form postal specialties to required shapes and sizes, with true lines and angles, square, rigid, and without warp, with metal faces flat and free of dents or distortion. Make exposed metal edges and corners free of sharp edges and burrs and safe to touch.
- B. Form joints exposed to weather to exclude water penetration.
- C. Where dissimilar metals will contact each other, protect against galvanic action by painting contact surfaces with bituminous coating or by other permanent separation.

2.4 FINISHES

- A. Finish postal specialties after assembly.
- B. Aluminum Baked-Enamel Finish: Apply baked enamel complying with paint manufacturer's written instructions for cleaning, conversion coating, and painting.
 - 1. Organic Coating: Thermosetting, modified-acrylic enamel primer/topcoat system with a minimum dry film thickness of 1.5 mils, medium gloss.
- C. Steel Finishes: Unless otherwise indicated, finish steel surfaces exposed to view with baked-enamel or powder-coated finish.
- D. Steel Surface Preparation: Remove mill scale and rust, if present, from uncoated steel, complying with SSPC-SP 5/NACE No. 1, "White Metal Blast Cleaning," or SSPC-SP 8, "Pickling."

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Metal Protection: Where aluminum and copper alloys will contact grout, concrete, masonry, wood, or dissimilar metals, protect against galvanic action by painting contact surfaces with bituminous coating or by other permanent separation.
- B. Final acceptance depends on compliance with USPS requirements.

3.2 FIELD QUALITY CONTROL

- A. Obtain written final approval from USPS postmaster that authorizes mail collection.

END OF SECTION 10550

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SECTION 11480 – PLAYGROUND EQUIPMENT

PART 1 - GENERAL:

1.1 SUMMARY:

- A. Composite playground equipment/structure.

1.2 RELATED DOCUMENTS:

- A. Drawings and general provisions of Contract apply to work of this section.

1.3 QUALITY ASSURANCE:

- A. Assemblies shall meet ADA requirements for accessibility and CPSC Handbook for Public Playground Safety (<http://www.cpsc.gov>).
- B. Provide complete assembly as specified herein from single manufacturer.
- C. Installer shall have installations of similar nature that have been in service for minimum 3 years.

1.4 WARRANTY:

- A. Provide manufacturer's standard warranty.

PART 2 - PRODUCTS:

2.1 ACCEPTABLE MANUFACTURERS:

- A. Miracle Recreation Equipment Co., P.O. Box 420, Monett, MO 65708, (Phone 1-417-235-6917) or approved equal.
 - 1. Model Number: Kid's Choice # 714-031 Center Stage and 714-852-2S ~~-Bay KC~~ -Arch | Swing.

2.2 MATERIALS:

- A. Composite wood materials with non-corrosive attachments/elements.
- B. Complete with manufacturer's standard hardware, and installation instructions.

PART 3 - EXECUTION

3.1 INSTALLATION:

- A. Install equipment to conform with manufacturer's instructions.
- B. Coordinate installation of footings for the play equipment with installing concrete paving.

END OF SECTION 11480

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SECTION 12356 - KITCHEN CASEWORK

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes kitchen and vanity cabinets and countertops.

1.2 SUBMITTALS

- A. Product Data: For cabinets, countertop material, and cabinet hardware.
- B. Shop Drawings: Include plans and elevations. Show materials, finishes, filler panels, hardware, countertop edge and backsplash profiles, cutouts for plumbing fixtures, and methods of joining countertops.
 - 1. Cabinets: Verify dimensions of installation areas by field measurements before fabrication and indicate measurements on Shop Drawings. Show fillers and scribes if necessary.
 - 2. Countertops: Verify dimensions of countertops by field measurements after base cabinets are installed but before countertop fabrication is complete.
- C. Samples: For each exposed finish.

1.3 QUALITY ASSURANCE

- A. Quality Standards:
 - 1. Cabinets: KCMA A161.1.
 - a. KCMA Certification: Provide cabinets with KCMA's "Certified Cabinet" seal affixed in a semiexposed location of each unit and showing compliance with the above standard.
 - 2. Plastic-Laminate Countertops: KCMA A161.2.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Available Products: Subject to compliance with requirements, cabinets that may be incorporated into the Work include, but are not limited to, the following:
- B. Products: Subject to compliance with requirements, provide one of the following:
 - 1. Wood-Mode, Inc., Kreamer, PA 717-374-2711 in cabinet style meeting minimum component sizes and features specified herein.
 - 2. Haas Cabinet Co., Inc., Sellersburg, Indiana 812-246-4431; in cabinet style meeting minimum component sizes and features specified herein.
 - 3. Regency Oak, cabinet modified to match existing as specified herein.
 - 4. Or Approved Equal by Contracting Officer

2.2 COLORS, TEXTURES, AND PATTERNS

- A. Colors, Textures, and Patterns: As selected by Contracting Officer from manufacturer's full range, unless otherwise indicated.

2.3 CABINET MATERIALS

A. Exposed Materials:

- 1. Exposed Wood Species: Red oak. Do not use two adjacent exposed faces that are noticeably dissimilar in color, grain, figure, or natural character markings.
- 2. Solid Wood: Clear hardwood lumber of species indicated, free of defects, selected for compatible grain and color, and kiln dried to 7 percent moisture content.
- 3. Plywood: Hardwood plywood complying with HPVA HP-1 with face veneer of species indicated, selected for compatible color and grain with Grade A faces.

B. Semiexposed Materials: Unless otherwise indicated, provide the following:

- 1. Solid Wood: Sound hardwood lumber, selected to eliminate appearance defects and kiln dried to 7 percent moisture content. Stained to be compatible with exposed surfaces.
- 2. Plywood: Hardwood plywood complying with HPVA HP-1 with Grade C faces stained to be compatible with exposed surfaces.

C. Concealed Materials:

- 1. Solid Wood or Plywood: Any hardwood or softwood species, with no defects affecting strength or utility. Hardwood and softwood lumber kiln dried to 7 and 10 percent moisture content, respectively.
- 2. Particleboard: ANSI A208.1, Grade M-2.
- 3. Medium-Density Fiberboard: ANSI A208.2.
- 4. Hardboard: AHA A135.4, Class 1 Tempered.

2.4 COUNTERTOP MATERIALS

A. Plastic Laminate: High-pressure decorative laminate complying with NEMA LD 3.

- 1. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
- 2. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Formica Corp.
 - b. Laminart.
 - c. Nevamar Corp.
 - d. Pioneer Plastics Corp.
 - e. Westinghouse Electric Corp.; Specialty Products Div.
 - f. Wilson, Ralph Plastics Co.
 - g. Or Approved Equal by Contracting Officer
- 3. Grade: HGP.
- 4. Color and Pattern: As selected by Contracting Officer from manufacturer's full range.

B. Particleboard: ANSI A208.1, Grade M-2.

- C. Plywood: Exterior softwood plywood complying with PS 1, Grade C-C Plugged, touch sanded.

~~D.Solid Surfacing Material: Homogeneous solid sheets of filled plastic resin complying with material and performance requirements of ANSI Z124.3, Type 5 or Type 6, without a precoated finish.~~

~~1.Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:~~

~~2.Manufacturers: Subject to compliance with requirements, provide products by one of the following:~~

~~a.Avonite, Inc.~~

~~b.DuPont Polymers.~~

~~c.Formica Corp.~~

~~d.Nevamar Corp.~~

~~e.Swan Corporation (The).~~

~~f.Wilson, Ralph Plastics Co.~~

~~g.Or Approved Equal by Contracting Officer~~

~~3.Color and Pattern: As selected by Contracting Officer from manufacturer's full range.~~

2.5 CASEWORK HARDWARE

- A. General: Complying with BHMA A156.9, of type, material, size, and finish as selected from manufacturer's standard choices.

- B. Drawer Guides: Epoxy-coated-metal, self-closing drawer guides; designed to prevent rebound when drawers are closed; with nylon-tired, ball-bearing rollers; and complying with BHMA A156.9, Type B05091.

2.6 CABINET CONSTRUCTION

- A. Face Style: Reveal overlay; door and drawer faces partially cover cabinet body or face frames.
- B. Face Frames: 3/4-by-1-5/8-inch solid wood.
- C. Door and Drawer Fronts: Solid-wood stiles and rails, 3/4 inch thick, with 1/4-inch- thick, veneer-faced plywood center panels.

4.72.7 PLASTIC-LAMINATE COUNTERTOPS

- A. Configuration: Fabricate Post-Formed type countertops with the following front, cove (intersection of top with backsplash), backsplash, and end-splash style:

1. Front: Rolled.

2. Cove: Cove molding (one-piece postformed laminate supported at junction of top and backsplash ~~by wood cove molding~~).

3. Backsplash: Square edge.

4. End Splash: Square edge.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install casework without variations in plane of adjoining surfaces; use concealed shims. Where casework abuts other finished work, scribe and cut for accurate fit. Provide filler strips, scribe strips, and moldings in finish to match casework face.
- B. Install casework and countertop level and plumb to a tolerance of 1/8 inch in 8 feet.
- C. Fasten cabinets to adjacent units and to backing.
 - 1. Fasten wall cabinets through back, near top and bottom, at ends and not less than 24 inches o.c.
- D. Fasten plastic-laminate countertops by screwing through corner blocks of base units into underside of countertop. Form seams using splines to align adjacent surfaces, and secure with glue and concealed clamping devices designed for this purpose.
- E. Fasten solid-surface countertops by screwing through corner blocks of base units into underside of countertop. Align adjacent surfaces, and form seams to comply with manufacturer's written instructions using adhesive in color to match countertop. Carefully dress joints smooth, remove surface scratches, and clean entire surface.
- F. Adjust casework and hardware so doors and drawers are centered in openings and operate smoothly without warp or bind. Lubricate operating hardware as recommended by manufacturer.

END OF SECTION 12356

SECTION 12491 - HORIZONTAL LOUVER BLINDS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes the following blinds with aluminum louver slats:
 - 1. Miniblinds.

1.2 SUBMITTALS

- A. Product Data: For each product indicated.
- B. Shop Drawings: Include plans, elevations, sections, details, details of installation, operational clearances, and relationship to adjoining Work.
 - 1. Verify dimensions by field measurements before fabrication and indicate measurements on Shop Drawings.
- C. Samples: For each exposed finish and for each color and texture required.
- D. Window Treatment Schedule: Use same room designations indicated on Drawings.
- E. Maintenance data.

1.3 QUALITY ASSURANCE

- A. Horizontal Louver Blinds Fire-Test-Response Characteristics: Provide products passing flame-resistance testing according to NFPA 701 by a testing agency acceptable to authorities having jurisdiction.
- B. Corded Window Covering Product Standard: Unless otherwise indicated, comply with WCMA A 100.1.

PART 2 - PRODUCTS

2.1 HORIZONTAL LOUVER BLINDS

- A. Available Products: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, the following:
- B. Products: Subject to compliance with requirements, provide one of the following:
 - 1. Hunter Douglas Window Fashions;.
 - 2. Levolor Contract;.
 - 3. Marathon Carey-McFall Div., Marathon .
 - 4. Or Approved Equal by Contracting Officer.
- C. Finish: Ionized coating; antistatic, dust-repellent, baked polyester.
 - 1. Slats: One color as indicated.
 - 2. Headrails/Valances: Match louver slats as indicated.
 - 3. Component Color: Rails, cords, ladders, and exposed-to-view metal and plastic matching or coordinating with slat color.
 - 4. Colors, Textures, Patterns, and Glosses: As selected by Contracting Officer from manufacturer's full range.

- D. Louver Slats: Aluminum, alloy and temper recommended by producer for type of use and finish indicated; with crowned profile and radiused corners.
 - 1. Miniblinds:
 - a. Nominal Slat Width: 1 inch.
 - b. Slat Spacing: Manufacturer's standard.
 - 2. Nominal Slat Thickness: Not less than ~~0.010~~ .008" thick.
 - 3. ~~Perforated Slats: Openness factor of 6 to 7 percent.~~
- E. Headrail: Formed steel or extruded aluminum; long edges returned or rolled; fully enclosing operating mechanisms on three sides and ends.
- F. ~~Headrail/Valance: Decorative, integrated headrail/valance not requiring a~~ separate valance ~~covering the headrail and~~ end brackets for finished appearance; formed steel or extruded aluminum; long edges returned or rolled at flush mounted locations; fully enclosing operating mechanisms on three sides and ends.
- G. Bottom Rail: Formed-steel or extruded-aluminum tube, sealed with plastic or metal capped ends; with enclosed and protected ladders and tapes to prevent their contact with sill.
 - 1. Top contoured to match crowned shape of louver slat.
 - 2. Bottom contoured for minimizing light gaps.
- H. Maximum Light Blocking Blinds: Designed for eliminating all visible light gaps if slats are tilted closed; with tight tape spacing indicated and slats with minimal-sized rout holes for ladders hidden and placed near back edge for maximum slat overlap; with headrail and bottom rail extended and formed for light-tight joints between rail and adjacent slats or construction.
- I. Tilt Control: Enclosed worm gear mechanism and linkage rod.
 - 1. Tilt Operation: Manual with clear plastic wand or cord-operated tilter.
 - 2. Length of Tilt Control: Length required to make operation convenient from floor level.
 - 3. Tilt: Full.
- J. Lift Operation: Manual, cord lock; locks pull cord to stop blind at any position in ascending or descending travel.
- K. Lift Operation: Manual, top-locking cord lock; locks pull cord to stop blind in either fully opened or fully closed position only and is equipped with a ring pull not more than 4 inches long.
- L. Tilt-Control and Cord-Lock Position: Right side and left side of headrail, respectively, unless otherwise indicated.
- M. Ladders: Evenly spaced to prevent long-term louver sag.
 - 1. Material: Braided string .
 - a. Tape Color, Texture, and Pattern: As indicated by manufacturer's designations .
- N. Valance: Manufacturer's standard.

- O. Mounting: End permitting easy removal and replacement without damaging blind or adjacent surfaces and finishes; with spacers and shims required for blind placement and alignment indicated.
 - 1. Provide intermediate support brackets if end support spacing exceeds spacing recommended by manufacturer for weight and size of blind.

2.2 FABRICATION

- A. Product Standard and Description: Comply with AWCMA Document 1029, unless otherwise indicated.
- B. Concealed Components: Noncorrodible or corrosion-resistant-coated materials.
 - 1. Lifting and Tilting Mechanisms: With permanently lubricated moving parts.
- C. Unit Sizes: Fabricated in sizes to fill window and other openings as follows, measured at 74 deg F:
 - 1. Blind Units Installed between (Inside) Jambs:
 - a. Width: Equal to 1/4 inch per side or 1/2 inch total, plus or minus 1/8 inch, less than jamb-to-jamb dimension of opening in which each blind is installed.
 - b. Length: Equal to 1/4 inch, plus or minus 1/8 inch, less than head-to-sill dimension of opening in which each blind is installed.
 - 2. Blind Units Installed Outside Jambs: Width and length as indicated, with terminations between blinds of end-to-end installations at centerlines of mullion or other defined vertical separations between openings.
- D. Installation Brackets: Designed for easy removal and reinstallation of blind, for supporting headrail, valance, and operating hardware, and for hardware position and blind mounting method indicated.
- E. Installation Fasteners: Not fewer than two fasteners per bracket, fabricated from metal noncorrosive to blind hardware and adjoining construction; type designed for securing to supporting substrate; and supporting blinds and accessories under conditions of normal use.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install blinds level and plumb and aligned with adjacent units according to manufacturer's written instructions. Install intermediate support as required to prevent deflection in headrail. Allow clearances between adjacent blinds and for operating glazed opening's operation hardware, if any.
 - 1. Location: Exterior louver edges in any position are not closer than 1 inch to interior face of glass.
- B. Flush Mounted: Install blinds with louver edges flush with finish face of opening if slats are tilted open.
- C. Jamb Mounted: Install headrail flush with face of opening jamb and head.

- D. Head Mounted: Install headrail on face of opening head.
- E. Recessed: Install headrail concealed within blind pocket.
- F. Adjusting: Adjust horizontal louver blinds to operate smoothly, easily, safely, and free from binding or malfunction throughout entire operational range.
- G. Cleaning: Clean blind surfaces after installation, according to manufacturer's written instructions.

END OF SECTION 12491

SECTION 12574 – OUTDOOR SITE ITEMS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes furniture, trash receptacles and picnic shelters used in outdoor areas.

1.2 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.3 SUBMITTALS

- A. Product Data: For each item specified. Include details of construction relative to materials, dimensions of individual components, profiles, and finishes.
- B. Maintenance Data: To include in the maintenance manuals specified in Division 1.

1.4 QUALITY ASSURANCE

- A. Source Limitations: Obtain each type item through one source from a single manufacturer.

PART 2 - PRODUCTS

2.1 OUTDOOR SITE ITEMS

- A. Product: Subject to compliance with requirements, provide outdoor site items specified in the Outdoor Site Item Schedule at the end of this Section.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Anchor outdoor site items in place using attachment method complying with manufacturer's written instructions.

3.2 ADJUSTING

- A. Adjust moving parts to ensure they are fully operational.

3.3 OUTDOOR SITE ITEM SCHEDULE

- A. Outdoor Site Item Designation: OF-[1] Bench.
 - 1. Provide one [1] bench at tot lot
 - 2. Provide four [4] benches where indicated along jogging path.
 - a. Manufacturer: Columbia Cascade
 - b. Manufacturer's Product Designation: Timberform Restoration - 6 foot
 - c. Source Address: 1975 S.W. Fifth Ave. Portland, Oregon 97201-5293
 - d. Source Phone Number: 1-800-547-1940
 - e. or approved equal
- B. Outdoor Site Item Designation: OF-[2] Trash Receptacle
 - 1. Provide three [35] trash receptacles where indicated on drawing - Federal Color #37056. |
 - a. Manufacturer: Columbia Cascade
 - b. Manufacturer's Product Designation: Timberform Renaissance 30
 - c. Source Address: 1975 S.W. Fifth Ave. Portland, Oregon 97201-5293
 - d. Source Phone Number: 1-800-547-1940
 - e. or approved equal

END OF SECTION 12574

SECTION 15400 - PLUMBING

PART 1 - GENERAL

1.1 WORK INCLUDED

- A. The work of this Section includes drainage piping, vent piping, domestic cold water piping, domestic hot water piping, natural gas piping, plumbing fixtures, pumps, drains, and piping specialties and accessories.

1.2 CODES

- A. Provide all plumbing work in conformance with the Uniform Plumbing Code and local Amendments.

1.3 SUBMITTALS

- A. Product data for the following:
 - 1. Drains.
 - 2. Pipe, valves, and fittings.
 - 3. Pipe specialties and accessories.
 - 4. Plumbing fixtures and trim.
 - 5. Pumps.
 - 6. Water Heaters.

PART 2 - PRODUCTS

2.1 DOMESTIC COLD WATER AND DOMESTIC HOT WATER PIPING

- A. Domestic Cold Water and Domestic Hot Piping (Above Ground):
 - 1. Pipe, Fittings, and Valves: Piping shall be copper. Conform to requirements of Section 15060.
 - 2. Provide chrome-plated construction for all exposed pipe, fittings, and valves.
- B. Domestic Water Piping (Underground Or Embedded in Concrete Up To Fitting at Connection To The Above Ground Water Piping):
 - 1. Type K copper tubing, soft drawn, ASTM B88.
 - 2. Fittings: Wrought copper solder joint, ANSI B16.22; cast bronze solder joint, ANSI B16.18.
 - 3. Brazing: Brazing alloy with melting temperature 1000 degrees F or higher, AWS A5.8.

2.2 NATURAL GAS PIPING

- A. Natural Gas Piping (Above Ground) and Natural Gas Vent Piping: Conform to the requirements of "Steel Piping - General" in Section 15060 with the following exceptions.
 - 1. Pipe:
 - a. 3/4 Inch and Smaller: Seamless Schedule 80 ASTM A106 Grade B steel piping.
 - b. One Inch and Larger: Seamless or electric resistance welded standard weight ASTM A53 Grade B steel piping.
 - 2. Fittings:
 - a. 2 Inch and Smaller: Threaded 150 psig malleable iron, ANSI B16.3 and ASTM A197.

3. Ball Valves: UL listed as a natural gas shut off valve; Apollo 81-100 Series one piece bronze ball valve; threaded end connections; 250 psig rating; TFE seats and seals.
 - a. Provide valve with pad-locking device where indicated on Drawings.

2.3 DRAINAGE AND VENT PIPING

- A. Sanitary Soil, Waste, and Vent Piping:
 1. Above Ground: Polyvinyl chloride (PVC) pipe and DWV fittings conforming to ASTM D2665; joined with solvent cement.
 2. Underground:
 - a. Standard weight bell and spigot cast iron pipe per ASTM A47, with neoprene compression seal; long pattern cast iron drainage fittings.
 - b. Standard weight hubless cast iron and pipe fittings per CISPI 301; long pattern cast iron drainage fittings. Coupling shall be Clamp-All "Hi-TORQ 125"; 0.024 inch thick Type 304 stainless steel housing with neoprene rubber sleeve gasket and Type 304 stainless steel clamps.
- B. Indirect Waste:
 1. Copper Drainage Tube: Type DWV, ASTM B306.
 2. Fittings:
 - a. Type DWV wrought copper drainage fittings, ANSI B16.29.
 - b. Type DWV cast bronze drainage fittings, ANSI B16.23.
- C. Pump Discharge Piping and Valves: This includes the discharge piping from the foundation drainage pumps.
 1. Above Ground Pipe and Fittings: Standard weight ASTM A53 galvanized steel pipe with threaded galvanized steel fittings.
 2. Underground Pipe and Fittings: Type K copper pipe with cast bronze or wrought copper fittings. Braze joints with brazing alloy that has a melting temperature 1000 degrees F or higher, AWS A5.8.
 3. Ball Valves: As specified in Section 15060.
 4. Check Valves: Check valve shall be a lever and spring type, with rubber seated swing check disc. The valve shall permit flow in one direction only and close tightly when discharge pressure exceeds inlet pressure. The valve body and self-aligning disc shall be of cast iron. The shaft shall be of stainless steel.

2.4 PIPING SPECIALTIES AND ACCESSORIES

- A. Acceptable Manufacturers: Jay R. Smith, Josam, Wade, Zurn, Jones, Mifab, Watts, Ancon, Woodford, Sioux Chief, Precision Plumbing Products or as specified.
- B. Floor Cleanouts: Jay R. Smith Figure 4020, or equivalent, cast iron body and frame, round adjustable secured nickel bronze top, bronze plug. Provide carpet clamping top where required.
- C. Flashings: Refer to Section 15050.
- D. Automatic Trap Primers: Precision Plumbing Products P/N-PO-500 with DV-2 distribution unit where required, or equivalent of Mifab; 1/2-inch connection, air gap type.
- E. Water Hammer Arresters: Jay R. Smith Models 5005 to 5050 or equivalent; in-line, factory-sealed shock arresters with screwed connections; shall meet PDI Standard WH-201.

- F. Dielectric Unions:
 - 1. 2 Inches and Smaller: Dielectric unions rated at 250 psig at 180 F conforming to ANSI B16.39.
 - 2. 2-1/2 Inches and Larger: Dielectric flange fittings conforming to ANSI B16.42 (iron) or ANSI B16.24 (bronze).
 - 3. Manufacturer: Watts 3000 Series, Epco, Perfection Corp. Dielectric Waterways or equivalent.

2.5 DRAINS

- A. Manufacturer: Jay R. Smith, Josam, Zurn, Ancon, Jones, Watts, or Wade unless specified otherwise.
- B. Catalog Numbers: Catalog numbers of one or more manufacturers describe exact drain required.
- C. Connection for Trap Priming: Provide a trap primer connection for floor drains that are indicated on Drawings to be primed.
- D. Floor Drain Type FD-A: Jay R. Smith figure 2010; enamel coated cast iron body and flashing collar with 8 inch diameter cast iron bar grate.

2.6 VENTS FOR GAS FIRED WATER HEATERS

- A. Type B Gas Vent System:
 - 1. UL listed double-wall type B vent system with galvanized steel outer wall and aluminum alloy inner pipe; complete with tees, elbows, and supports as required.
 - 2. Manufacturer: Metalbestos, AMPCO, or Metal-Fab.

2.7 FOUNDATION DRAINAGE PUMPS AND BASINS

- A. Pump: Liberty Pumps Model "257 VMF" simplex submersible sump pump suitable for handling 1/2 inch solids or approved equal. Pump shall have a one piece cast iron housing with support legs; epoxy powder coat finish; vortex style impellers constructed of high temperature engineering polymer; hermetically sealed motor and switch cavities and permanently lubricated bearings; thermal overload protection; carbon and ceramic shaft seal; quick disconnect power cord with length as required to reach electrical receptacle; non-corrosive stainless steel fasteners; Type 416 stainless steel rotor shaft. Provide pump with a vertical magnetic float switch.
- B. Sump Basin: Liberty Pumps Model "SP1824" sump basin or approved equal; 24 gallon capacity; constructed of high density polyethylene; with openings as shown on Drawings.
 - 1. Sump Cover: Liberty Pumps Model "SC1801" sump cover or approved equal; constructed of high density polyethylene; slotted opening for submersible pump; and with openings as shown on Drawings.

2.8 WATER HEATERS

- A. Water heaters shall be A. O. SMITH, Model FSG-40 gas tank type water heater or approved equal of PVI, Bradford White, or American Standard. Heaters shall be glass-lined, gas-fired, design certified to meet the latest ANSI Standard by the American Gas Association. Gas control shall totally regulate the gas supply to main and pilot burners. Heaters shall have a maximum working pressure of 150 psi, a with 3/4 inch tapping for relief valve installation and a rigidly supported anode rod for maximum cathodic protection. All internal surfaces of the heaters exposed to water shall be glass-lined with an alkaline borosilicate composition fused-to-steel.

Heaters shall also be quipped with an automatic shutoff device to shutoff entire gas supply in event of excessive temperature in tank. Heaters shall also be equipped with an A.G.A. certified draft hood. Tank shall be foam insulated or equal. Outer jacket shall have a baked enamel finish.

2.82.9 PLUMBING FIXTURE TRIM

- A. Trim is defined as any metal part used with a fixture; i.e., faucets, drains, traps, and supplies.
- B. Exposed metal parts shall be chrome plated except where specified as stainless steel.
- C. Stops: Loose key pattern with shield, have a polished finish where exposed and rough where concealed; Bridgeport Brass, Brass Craft (Speedway), Teledyne Ansonia, or equivalent. Provide stops in each water connection to each fixture, except where a fitting has integral stops.
- D. Exposed Supplies: 3/8 inch outside diameter chrome plated tubing.
- E. Traps: Chrome plated 17 gauge copper alloy, adjustable, with cleanout. Provide for all lavatories and counter sinks.
- F. Provide escutcheons per requirements of Section 15060 at each point where pipe or other fittings enter wall at fixture.
- G. Provide vacuum breaker, with a flow-through pattern, on the water supply to each fixture which has a water connection located below the rim, or a hose attachment.

2.92.10 PLUMBING FIXTURE SCHEDULE

- A. General:
 - 1. Vitreous China Fixtures: Catalog numbers are American Standard; equivalent of Kohler, Eljer, or Crane are acceptable.
 - 2. Stainless Steel Sinks: Catalog numbers are Just; equivalent of Elkay or Aristaline are acceptable.
 - 3. Faucets: Catalog numbers are Chicago Faucets; equivalent of T & S Brass and Bronze Works is acceptable.
 - 4. Shower Valves: Catalog numbers are Symmons; equivalent of Powers or Leonard are acceptable.
 - 5. Color of Vitreous China Plumbing Fixtures: White.
- B. Counter Mounted Lavatory (P1-1): American Standard "Aqualyn" No. 0475.047; ADA compliant; vitreous china, oval, self-rimming, countertop lavatory with front overflow and a faucet ledge drilled for 1 center hole; 20-3/8 inch by 17 inch size.
 - 1. Faucet: Chicago Faucets "Marathon" Model 2201 single control faucet with pop-up drain, soft closing valve, 4-3/4 inch spout, and modified to be furnished with a No. E2605 0.5 gpm outlet; ADA compliant.
- C. Floor Mounted Water Closets (P2-1): American Standard "Colony" No. 2199.017; 1.6 gallons per flush; vitreous china; elongated siphon action bowl; close coupled tank, Aquameter water control; and left hand chrome plated trip lever.
 - 1. Closet Seat: White, closed front, elongated with cover; Church No. 380TL or approved equal of Sperzel, Olsonite, or Beneke.
- D. Double Compartment Counter Mounted Sinks (P3-1): Just Model No. DL-1933-A-GR double compartment counter mounted sink; 20 gauge, Type 304 or 302 stainless steel; self-rimming, integral flange and ledge; with 1-hole drilling centered between compartments for faucet, 1 hole offset to the left for a dishwasher air gap fitting, and 1 hole offset to the right for a hose spray;

overall dimensions of 19 inches front to back by 33 inches left to right by 7 inches deep; inside dimensions of each compartment of 14 inches front to back by 14 inches left to right by 7 inches deep; underside of sink shall be sound deadened.

1. Faucet: Chicago Faucets "Marathon" Model 2301 single control faucet with diverter hose and spray, soft closing valve, 10 inch spout, and a No. E12 two gpm aerator; ADA compliant.
2. Drain: Just Model No. J-35-SSF Type 304 stainless steel perforated grid strainer and 1-1/2 inch diameter tailpiece.
3. Garbage Disposal: In-Sink-Erator Model 77; continuous feed, automatic reversing action; 3/4 horsepower split phase motor, corrosion protection shield, stainless steel lugs.
4. Dishwasher Air Gap Fitting: Brasscraft, Bristol Corporation, or Moen; ASSE 1021, plastic body, chrome plated brass cover, rated for 5 psi at 140 degrees F and 5 gpm minimum.
5. Dishwasher Hose: Rubber hose suitable for dishwasher drain; length as required for connection to dishwasher.

E. Tub Bath and Shower (P4-1):

1. Tub and Shower: Aqua Glass Model 626034B acrylic tub/shower unit or approved equal; white in color; unit construction shall be of molded, reinforced fiberglass with a cellular inner core and a reinforced fiberglass outer protective coating; finished surface shall be of a sanitary-grade methyl-acrylate (acrylic); flame spread rating of less than 200 as tested to ASTM E-162 and shall achieve a flame spread index rating of "C"; unit shall comply with HUD UM Bulletin 73A and have a smoke generated rating of less than 450. Unit shall be provided with 3 molded in soap/shampoo shelves and a textured floor. Rough-in dimensions shall be 60 inches wide by 33-1/4 inches deep by 84 inches high. Furnish with a 1 inch outside diameter Type 304 stainless steel curtain rod and a white commercial grade vinyl shower curtain. Provide left or right handed valve wall as shown on Drawings.
2. Mixing Valve, Shower Head, and Diverter Tub Spout: Symmons 1-215-X; pressure balancing mixing valve with integral stops and adjustable stop screw to limit handle turn; Super shower head with arm and flange, 2.5 gpm flow control; diverter tub spout with twin ell; chrome plated finish.
3. Drain: Kohler "Clearflow" No. K-7160-TF-CP adjustable pop-up drain or approved equal; polished chrome finish.

F. Shower (P4-2):

1. Shower Stall: Aqua Glass Model 913636AC "DuraTile Series" shower unit or approved equal; white in color; unit construction shall be of molded reinforced fiberglass with a cellular inner core and a reinforced fiberglass outer protective coating; finished surface shall be of a sanitary-grade polyester gelcoat; flame spread index rating of less than 75 as tested to ASTM E-84 and shall achieve a flame spread rating of "B"; unit shall comply with HUD UM Bulletin 73A and have a smoke generated rating of less than 450. Unit shall have a center drain and textured base. Rough-in dimensions shall be 36 inches wide by 36 inches deep by 75-3/4 inches high. Furnish with a 1 inch outside diameter Type 304 stainless steel curtain rod and a white commercial grade vinyl shower curtain.
2. Shower Head and Mixing Valve: Symmons 1-100-X; pressure balancing mixing valve with integral stops and adjustable stop screw to limit handle turn; Super shower head with arm and flange; 2.5 gpm flow control; chrome plated finish.

G. Recessed Wall Mounted Washer Service Box For Clothes Washer (P5-1): Guy Gray Model No. B200 or approved equal; for 2 inch drain pipe and for bottom supply with 2 hose end quarter turn ball valves; 20 gauge box and 18 gauge faceplate made of G90 hot dipped galvanized steel.

H. Recessed Wall Mounted Water Outlet Box For Refrigerator (P5-2): Guy Gray Model No. BIM875 or approved equal; for bottom supply with one compression outlet quarter turn ball valve; 20 gauge box and 18 gauge faceplate made of G90 hot dipped galvanized steel.

- I. Wall Hydrants (P6-1): Jay R. Smith Figure 5509QT or approved equal; bronze nickel plated quarter turn non-freeze hydrant with hose connection, integral vacuum breaker. "T" handle key, and stainless steel box with full 180 degree cover opening. Hydrant shall meet ANSI A112.21.3 specifications.

PART 3 - EXECUTION

3.1 GENERAL

- A. Inspection:
 1. Carefully inspect installed work of other trades and verify that such work is complete to the point where this installation may properly commence.
 2. Verify that plumbing is installed in accordance with pertinent codes, regulations, and Drawings.
- B. Discrepancies: In the event of discrepancy, immediately notify the Contracting Officer; do not proceed with installation until discrepancies have been resolved.

3.2 INSTALLATION OF BUILDING PIPING AND EQUIPMENT

- A. General: Install piping and equipment in accordance with Section 15060 and as follows.
 1. Install piping promptly, capping or plugging open ends and in a manner to conserve space for other work.
 2. Unless otherwise indicated, provide uniform pitch of at least 1/4 inch per foot for horizontal waste and soil piping within building.
 3. Support all piping independently from connected equipment.
 4. Inspect each piece of pipe, fitting, and equipment for defects and obstructions; promptly remove defective material from job site.
 5. Install pipes to clear beams and obstructions; do not cut into or reduce size of load carrying members without the approval of the Contracting Officer.
 6. Water Hammer Arrestors: Install sizes selected from manufacturer's tables to match branch pipe size, fixture units of attached fixtures and equipment, and to suit system pressure at point of installation. Placement and connections shall be per PDI Standard WH-201, with the exception that a water hammer arrestor is not required on a branch line which has only a single fixture unless there is a line mounted water solenoid valve in the branch line. Install in an upright position and in an accessible location.
 7. Automatic Trap Primers: Provide trap primers where drains are indicated to be primed and where required by the plumbing code. Connect primer line on the top of a horizontal cold water line and install trap primer valve and distribution unit in an accessible location.
 8. Provide unions for all equipment requiring disconnection for service including, but not limited to, the following.
 - a. Discharge of relief valves.
 - b. Inlet and outlet of trap primers.
 9. Dielectric Fittings: Provide dielectric fitting at each joint between dissimilar metals, except that bronze valves and fittings may be used without dielectric fittings for ferrous-to-ferrous or non-ferrous-to-non-ferrous connections. Provide a union at each dielectric fitting.
 10. Cleanouts: Provide where shown and install at all locations required by code and as required to permit cleaning of piping. Provide cleanouts full size of pipe, but not larger than 4 inch. Where cleanouts occur in floor, install top flush with floor. Install cleanouts threads with graphite. Locate cleanouts to clear cabinet work and make them easily accessible.
 11. Excavation, Backfilling, and Compaction Requirements For Underground Piping: Per requirements in Section 15050.
- B. Joints and Connection For Cast Iron Soil Pipe:

1. Bell and Spigot: Neoprene compression seal, specifically designed for pipe and fittings used, installed in strict accordance with manufacturer's printed instructions.
 2. Laying of Bell and Spigot Piping: Piping, installed in bedding of trench, graded to provide uniform support for pipe with bell holes to permit joining. Bells, at upgrade end.
 3. Hubless: Install neoprene gasket and stainless steel shield coupling jointing assemblies with bolts alternately and incrementally tightened to 60 inch-pounds torque, minimum. Use single set-point torque wrench manufactured specifically for this purpose, use of screwdrivers or other types of wrenches not permitted. Retorque bolts after 24 hours.
- C. Hangers and Supports:
1. Provide hangers and supports for aboveground hubless cast iron pipe in accordance with CISPI Pamphlet No. 100.
 2. Use wall brackets for supporting piping adjacent to walls or other vertical surfaces. Use bolted steel clamps for supporting vertical lines. Place supports as near as possible to concentrated loads and, when practicable, immediately adjacent to changes in direction. Support horizontal piping so as to maintain alignment, prevent grade reversals, and prevent sagging.
 3. Water Piping: Per requirements in Section 15060.
- D. Natural Gas Piping:
1. All natural gas pipe, fittings, and accessories in above ground exterior locations shall be protected from corrosion by field painting.
 2. Provide moisture pockets at the low point of any main, riser, or trapped section, consisting of drip leg 6 inches long with threaded cap.

3.3 FIXTURE INSTALLATION

- A. Locate fixtures where indicated on the Drawings. Refer to Architectural Drawings for mounting heights. Locate in accordance with details and dimensions on Drawings. Use the type of mountings specified.
- B. Secure the floor outlet of floor-mounted fixtures rigidly to the drainage connections and the floor.
- C. Support wall-hung fixtures rigidly with metal supporting members so no stress is transmitted to connections. Fit fixtures on finished walls without noticeable warpage on either the wall or fixture.
- D. Make all connections gas tight and water tight.
- E. Use one-piece special molded gaskets for connections between earthenware of fixtures and soil pipe flanges. Do not use bulk material, including putty and plastic, for gaskets.
- F. Provide individual vents for each fixture.
- G. Provide separate traps, where manufacturers do not supply trap for fixture.
- H. Provide silicone sealer between the top and the sides of plumbing fixtures edges and adjacent wall and countertop surfaces; General Electric No. 1200 or Dow Corning No. 780. Apply per manufacturer's recommendations to form a smooth unobtrusive joint. Install one sample joint on each type of fixture for the Contracting Officer's review before proceeding with installation of remainder of this sealant.
- I. Securely anchor water pipes (in walls or pipe chases) that are connected to shower heads.

3.4 CONCEALED WORK

- A. General: Do not cover up or enclose work until inspected and approved.
- B. Noncompliance: Should work be covered up or enclosed prior to required inspections, uncover work as required and, after inspection and approval, make repairs and replacements.

3.5 TESTING

- A. New Drainage and Vent Piping Tests:
 - 1. Make pressure test of 5 psi minimum, witnessed by the Plumbing Inspector.
 - 2. Make pipe leaks tight, repeat test.
- B. Pump Discharge Piping From the Foundation Drainage Pumps: Hydrostatic test at 1-1/2 times design working pressure for 2 hours with no leakage. If initial test fails, make pipe leaks tight and repeat test.
- C. New Water Piping: Test with water at 1-1/2 times working pressure.
- D. New Natural Gas Piping: Test with air at 10 psig for a minimum of 2 hours with no perceptible drop in pressure. Test for leaks by brushing with a soapy water solution.
 - 1. Perform pressure test required for final piping inspection by the local building official as stated in the Uniform Mechanical Code.
- E. Trap Primers: Provide test results to certify acceptable operation.

3.6 CLEANING UP

- A. Prior to acceptance of building, thoroughly clean exposed portions of plumbing installation, removing labels and traces of foreign substance, using only a cleaning solution approved by manufacturer of plumbing item and being careful to avoid damage to finished surfaces.

3.7 STERILIZATION AND FLUSHING

- A. Disinfect new domestic water piping and existing domestic water piping affected by Contractor's operations in accordance with AWWA C651. Fill piping systems with solution containing minimum of 50 parts per million (ppm) of available chlorine and allow solution to stand for minimum of 24 hours. Flush solution from the systems with domestic water until maximum residual chlorine content is within the range of 0.2 to 0.5 ppm, or the residual chlorine content of domestic water supply. Obtain at least two consecutive satisfactory bacteriological samples from new water piping, analyze by a certified laboratory, and submit the results prior to the new water piping being placed into service.

3.8 SYSTEMS OPERATION DEMONSTRATION

- A. Subject systems to such operating tests as are required to demonstrate that the equipment installed will operate within the specified limits through normal ranges and sequences including simulation of possible abnormal conditions. Operate every device manually and automatically, in accordance with its purpose. Operating test duration; not less than 6 hours after all major corrections have been made.

- B. If tests do not demonstrate satisfactory system performance, correct deficiencies and retest systems.

END OF SECTION 15400

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SECTION 16140 - WIRING DEVICES GENERAL

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes wall switches; receptacles; and device plates.

1.2 REFERENCES

- A. NECA (National Electrical Contractors Association) - Standard of Installation.
- B. NEMA WD 1 (National Electrical Manufacturers Association) - General Requirements for Wiring Devices.
- C. NEMA WD 6 (National Electrical Manufacturers Association) - Wiring Device -- Dimensional Requirements.

1.3 SUBMITTALS

- A. Section 01330 - Submittal Procedures: Submittal procedures.
- B. Product Data: Submit manufacturer's catalog information showing dimensions, colors, and configurations.

1.4 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this section with minimum three years experience.

1.5 EXTRA MATERIALS

- A. Section 01700 - Execution Requirements: Spare parts and maintenance products.
- B. Furnish two of each style, size, and finish wall plate.

PART 2 - PRODUCTS

2.1 WALL SWITCHES

- A. Manufacturers:
 - 1. Arrow Hart.
 - 2. Bryant.
 - 3. GE.
 - 4. Hubbell.
 - 5. Leviton.
 - 6. Pass & Seymour.
 - 7. Substitutions: Not Permitted.
- B. Product Description: NEMA WD 1, Specification grade, AC only general-use snap switch.
- C. Body and Handle: ~~Ivory~~White plastic with toggle handle.
- D. Ratings:
 - 1. Voltage: 120-277 volts, AC.

2. Current: 20 amperes.

2.2 RECEPTACLES

- A. Manufacturers:
 1. Arrow Hart.
 2. Bryant.
 3. GE.
 4. Hubbell.
 5. Leviton.
 6. Pass & Seymour.
 7. Substitutions: Not permitted.
- B. Product Description: NEMA WD 1, Specification grade general use receptacle.
- C. Device Body: ~~Ivory~~ White plastic.
- D. Configuration: NEMA WD 6, type as indicated on Drawings.
- E. Convenience Receptacle: Type 5-20.
- F. GFCI Receptacle: Convenience receptacle with integral ground fault circuit interrupter to meet regulatory requirements.

2.3 WALL PLATES

- A. Manufacturers:
 1. Arrow Hart.
 2. Bryant.
 3. GE.
 4. Hubbell.
 5. Leviton.
 6. Pass & Seymour.
 7. Substitutions: Not permitted.
- B. Decorative Cover Plate: Ivory, nylon.
- C. Weatherproof Cover Plate: Gasketed cast metal plate with threaded and gasketed device cover.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Section 01310 - Administrative Requirements: Coordination and project conditions.
- B. Verify outlet boxes are installed at proper height.
- C. Verify wall openings are neatly cut and completely covered by wall plates.
- D. Verify branch circuit wiring installation is completed, tested, and ready for connection to wiring devices.

3.2 PREPARATION

- A. Clean debris from outlet boxes.

3.3 EXISTING WORK

- A. Disconnect and remove abandoned wiring devices.
- B. Modify installation to maintain access to existing wiring devices to remain active.
- C. Clean and repair existing wiring devices to remain or to be reinstalled.

3.4 INSTALLATION

- A. Install in accordance with NECA "Standard of Installation."
- B. Install devices plumb and level.
- C. Install switches with OFF position down.
- D. Install 3- and 4- way switches so that the circuit is off when all switch handles are in the down position.
- E. Install receptacles with grounding pole on bottom.
- F. Connect wiring device grounding terminal to branch circuit equipment grounding conductor.
- G. Install decorative plates on switch, receptacle, and blank outlets in finished areas.
- H. Connect wiring devices by wrapping solid conductor around screw terminal. Install stranded conductor for branch circuits 10 AWG and smaller. When stranded conductors are used in lieu of solid, use crimp on fork terminals for device terminations. Do not place bare stranded conductors directly under device screws.
- I. Use jumbo size plates for outlets installed in masonry walls.
- J. Install galvanized steel plates on outlet boxes and junction boxes in unfinished areas, above accessible ceilings, and on surface mounted outlets.

3.5 INTERFACE WITH OTHERPRODUCTS

- A. Coordinate locations of outlet boxes provided under Section 16130 to obtain mounting heights as specified and as indicated on drawings.
- B. Install wall switch 48 inches above finished floor.
- C. Install convenience receptacle 18 inches above finished floor.
- D. Install convenience receptacle 6 inches above counter.

3.6 FIELD QUALITY CONTROL

- A. Inspect each wiring device for defects.
- B. Operate each wall switch with circuit energized and verify proper operation.
- C. Verify each receptacle device is energized.
- D. Test each receptacle device for proper polarity.

- E. Test each GFCI receptacle device for proper operation.

3.7 ADJUSTING

- A. Adjust devices and wall plates to be flush and level.

3.8 CLEANING

- A. Section 01770 – Closeout Procedures: Final cleaning.
- B. Clean exposed surfaces to remove splatters and restore finish.

END OF SECTION 16140

NOTE: THIS SECTION IS ADDED IN ITS ENTIRETY BY AMENDMENT 0003.
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SECTION 16491 - FUSES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes fuses.

1.2 REFERENCES

- A. NEMA FU 1 (National Electrical Manufacturers Association) - Low Voltage Cartridge Fuses.

1.3 FUSE PERFORMANCE REQUIREMENTS

- A. Street Lighting Load Feeder Switches: Class RK1 (time delay).

1.4 SUBMITTALS

- A. Division 1 - Submittal Procedures: Submittal procedures.
- B. Product Data: Submit data sheets showing electrical characteristics, including time-current curves.

1.5 CLOSEOUT SUBMITTALS

- A. Division 1 - Execution Requirements: Closeout procedures.
- B. Project Record Documents: Record actual sizes, ratings, and locations of fuses.

1.6 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this section with minimum three years [documented] experience.

PART 2 - PRODUCTS

2.1 FUSES

- A. Dimensions and Performance: NEMA FU 1, Class as specified or as indicated on Drawings.
- B. Voltage: Rating suitable for circuit phase-to-phase voltage.

2.2 CLASS RK1 (TIME DELAY) FUSES

- A. Dimensions and Performance: NEMA FU 1.
- B. Voltage: Rating suitable for circuit phase-to-phase voltage.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install fuse with label oriented so manufacturer, type, and size are easily read.

END OF SECTION

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1 BEFORE THE DEPARTMENT OF THE ARMY
2 SEATTLE DISTRICT, CORPS OF ENGINEERS
3
4
5 PRE-PROPOSAL CONFERENCE AND SITE TOUR
6 IMPROVED CAPEHART FAMILY HOUSING, PHASE 3
7 DACA 67-02-R-0204
8
9

10
11 TRANSCRIPT OF THE PROCEEDINGS
12

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14 Held at the Education Center
 Malmstrom Air Force Base
15

 February 6, 2002
16 9:30 a.m.
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1 WHEREUPON, the following proceedings were had:

2 MS. GARY: Good morning, everyone. I am
3 Nancy Gary, Contract Specialist with the Corps of
4 Engineers in Seattle, and I want to welcome you all to
5 our pre-proposal conference and site tour of the project
6 entitled "Improved Capehart Family Housing, Phase 3,"
7 for Malmstrom. I want to introduce two of my
8 co-workers, Project Manager Jim Nakamoto and
9 Duane Johnson, Technical Manager.

10 There's a sign-in sheet. For those that were late,
11 make sure that you get your name and company name on
12 there. We have a court reporter here, Cheryl, who's
13 recording the minutes of our meeting.

14 During this conference, you can stop us and ask any
15 questions. Before you ask a question, make sure that
16 you state your company name and your individual name.
17 You can also hand in the questions, after the meeting,
18 to us. We'll try to answer any questions today. If we
19 can't, then we will say that we'll get back to that at a
20 later time.

21 And I mentioned about stating your name and company
22 name before you ask a question.

23 Any comments or clarifications made today will not
24 change the solicitation in any way. This is simply for
25 information purposes only. Any changes to the

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1 solicitations will be made through written amendments.
2 An amendment will be issued to include the minutes from
3 this pre-proposal conference, and the attendees will
4 also be published, and any written questions that we
5 have to get back to.

6 The project consists of renovation of 46 units,
7 divided into 4 similar but distinctive units of family
8 housing. The buildings were built in the 1940s, wood
9 frame construction, clustered together in a closed
10 neighborhood situation.

11 The work will be done under a base and a number of
12 options. The base includes 11 buildings, approximately
13 4 of which are partially demolished. The demolished
14 buildings have been boarded up or winterized. The
15 remaining buildings are vacant and intact, ready for
16 demolition. Renovation will include replacement of all
17 interior finishes, appliances, carpeting, cabinets,
18 hardware, electrical, HVAC systems, and associated site
19 utilities, landscaping and playground. Renovation will
20 also include lead-based paint abatement. Optional work
21 will include main floor addition, new basement under new
22 addition, and other work.

23 Jim, do you want to make any comments?

24 Are there any questions on the basic description so
25 far?

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1 MR. NAKAMOTO: The part about demolition is a
2 plus or minus 4. I can't remember exactly, but they're
3 in various stages. So you'll have a chance to see each
4 individual, or however many you want to see. They'll be
5 ready for examination. Right now, it's dark; we've got
6 some flashlights around. And if you have any questions,
7 we'll collect them later.

8 Are there any questions on the project, the intent
9 or the scope? It's more fully defined in the proposal.
10 If there's no questions, go ahead.

11 MS. GARY: This solicitation is a request for
12 proposal, not an invitation for bid. There's a couple
13 of main differences that affect you. There is no bid --
14 public bid opening. The proposals are due at a
15 particular time and date, and that is Seattle time.
16 Another big difference for you between an offer and a
17 bid is that it's not solely looked at for price. We
18 have technical criteria that are involved.

19 The most important section for you to look at is
20 Section 100, Intro. That lists all of your technical
21 criteria. You have to go through and answer and respond
22 to each and every technical criteria that we're talking
23 about.

24 Also in that Section 100, it will tell you exactly
25 how to put the proposal together, how many pages, what

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1 type of print, and so forth. So it's a very important
2 section.

3 The technical proposals are due in Seattle, Seattle
4 time, at 3 p.m. on the 26th of February.

5 On our standard form, 1442, there's a couple of
6 very important spots. You need to make sure that the
7 proposal is signed; that there is a page, I think it's
8 the second page into that 1442, that you acknowledge
9 each and every amendment. There, again, is not an
10 official bid opening time, since this is not a bid, it
11 is a proposal. And make sure that your corporate
12 certificate is correctly completed.

13 The Government intends to make award based on
14 initial offers, so do not assume that we're going to go
15 back out and ask for additional information or
16 clarification. Do your best proposal right up front.

17 MR. WADSWORTH: Explain that again, you could
18 ask for more --

19 MS. GARY: We could, but it is our intention to
20 go out on initial proposals. We could go back for
21 clarifications, so forth, but do your best proposal
22 right up front.

23 MR. NAKAMOTO: Excuse me for just a second. If
24 you have a question, we need for you to identify
25 yourself, and if you have a difficult-spelling name, you

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1 need to spell it for the reporter before you ask your
2 questions.

3 MS. GARY: So if you could say your company
4 name and name, please.

5 MR. WADSWORTH: Cliff Wadsworth, from Wadsworth
6 Builders.

7 MR. NAKAMOTO: Thank you.

8 MS. GARY: And for large businesses only, at
9 the time that the proposal comes in, you must submit
10 your subcontracting plan. That's another big difference
11 between a proposal. For the purposes of this project,
12 you're considered large if your annual receipts for the
13 last three years averaged 27 and a half million.

14 Just for information purposes, after this month,
15 any new solicitations that come out, that figure has
16 been raised, I believe to 28 and a half million.

17 So the contract will be awarded to the firm
18 submitting the proposal that represents the best value
19 to the Government. And they achieve the most favorable
20 balance between technical merit and price factors, so
21 this will all be based on best value.

22 The proposal costs that you incur will not be paid
23 by the Government.

24 Any information other than technical changes or
25 administrative clarifications will not be provided

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1 during the evaluation process. So once those proposals
2 come in, we will give out no information whatsoever of
3 who submitted proposals or any, any information
4 whatsoever until the actual award.

5 You can check in -- Everything that we do here in
6 Contracting is based on the Federal Acquisition
7 Regulation. That is available to everyone on-line, and
8 you can certainly look up anything on-line as far as the
9 FAR goes. It will tell you about debriefings and, if
10 you want a debriefing, how quickly you need to get that
11 request in to us. And I added these last two paragraphs
12 here. As soon as award happens, you have three calendar
13 days to get your request in to Contracting Office.

14 By the way, let me go back. One thing I forgot to
15 mention about the proposals, they do come in to our
16 Seattle Contracting Office, so make sure you don't send
17 them to anyplace else but to Contracting.

18 In this Section 100, Intro, that I told you was
19 very important, technical criteria have been set up. It
20 provides information on the evaluation and award
21 procedures also, so it gives you valuable information
22 how to put that proposal together. The criteria
23 includes experience, past performance, qualifications,
24 schedule, organizational structure, and last but not
25 least, extent of small and small disadvantaged business

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1 participation.

2 Does anyone have any questions on the criteria?

3 And each criteria will explain what we're looking
4 for and what you need to present.

5 Read the descriptions of each evaluation criteria
6 thoroughly. Ensure your proposal is complete and
7 reflects all elements required by the solicitation.
8 Don't assume that we're going to go back out; give it
9 your best effort right up front.

10 I don't know if I've covered this or not yet, but
11 on your price, when you put in the pricing schedule,
12 make sure that there are no qualifications to it; that
13 the price is there all by itself.

14 Proposals are evaluated on their own merit and
15 against the evaluation criteria, not against other
16 proposals.

17 Your proposal should come in in two parts, in two
18 separate envelopes. One is your technical proposal, and
19 the other envelope will be your price. Both those
20 sealed envelopes come in at the same time to Seattle.

21 Under the criteria, the old fashioned point rating
22 system is no longer used. In the past year, we've
23 developed an adjectival rating description of the four
24 categories: Outstanding, above average, and so forth.

25 A firm fixed-price contract will be awarded to one
0010

1 firm submitting the proposal that conforms to all of the
2 request for proposal; is considered to offer the best
3 value to the Government in terms of the criteria,
4 including price; and is determined to be in the best
5 interest of the Government.

6 We take a look at price. Price is evaluated only
7 for reasonableness, but not rated. All factors other
8 than cost or price, when combined, are significantly
9 less important than cost or price. So in this RFP,
10 we're looking at technical criteria as being more
11 important than price.

12 It is the intent of the Government to make award
13 based upon initial offers without further discussions or
14 additional information. That doesn't mean that we can't
15 use that, if needed.

16 Competitive range, we may establish a competitive
17 range prior to discussions. That range would be
18 comprised of the most highly rated proposals, unless the
19 range is further reduced for purposes of efficiency.
20 Discussions may be held with firms in that competitive
21 range, and we could go either written or oral. We used
22 to refer to "best and final offer," if we go out; but
23 now, it's called "receipt of final offer."

24 And to quickly go through the rest of the
25 solicitation, Section 600, your reps and certs section,
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1 also needs to be submitted at the same time, along with
2 your proposal. And every single thing needs to be
3 filled out. If you leave something out, it may affect
4 your proposal.

5 Section 700 has all of our clauses, and they're all
6 full text.

7 Section 800 has all of the clauses included that
8 are unique to this requirement.

9 Commencement of the contract is the date the
10 contractor receives the Notice to Proceed, and they must
11 complete the entire work, ready for use, not later than
12 330 calendar days from the Notice to Proceed. And
13 that's included in Special Clause No. 1.

14 Your liquidated damages is in the next clause,

15 Special Clause No. 2. Performance of work by the
16 contractor, the prime contractor must perform at least
17 15 percent of the work, and that is included in Special
18 Clause No. 7.

19 Your Davis-Bacon wage determination is for the
20 geographic area of this project, and that would, of
21 course, be for Malmstrom. The Davis-Bacon establishes
22 the minimum amount to be paid to your workers. And
23 since this -- This is another change from a bid, since
24 this is a request for proposals: Updates of the
25 Davis-Bacon will be incorporated up to the date of

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1 award.

2 And in conclusion, just make sure that you have all
3 your information required by the solicitation package,
4 submit those items with your proposals, your reps and
5 certs; your price schedule is in a separate envelope;
6 ensure compliance with the solicitation.

7 Our solicitation is only changed by means of a
8 written amendment.

9 The Government intends to award on initial offers,
10 I've said that before. Proposals should be submitted
11 initially on the most favorable terms.

12 And then the next most important thing is all of
13 our e-mail addresses. And I want to say a quick word
14 about the Techbid, technical e-mail. If you develop
15 questions along the way, and I have hundreds and
16 hundreds of phone calls every day, submit your questions
17 in writing to that Techbid. It goes directly into our
18 Specifications Section. Several people are looking at
19 them daily.

20 What they initially do is they take a look at your
21 questions, take a look at our specifications, and see,
22 first of all, if an amendment needs to be done right
23 away to correct a faulty spec or something that may be
24 left off or whatever.

25 If the Spec Section feels that the specifications

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1 are clear and accurate, you may not get a response back
2 to your individual question. The general rule is, the
3 specs stand as written. We shy away from, for obvious
4 reasons, giving information to one company over everyone
5 else. So for that reason, if you don't get a direct
6 response, use your expertise in your particular field,
7 and the specs stand as written.

8 Anybody have any questions along the way?

9 My phone number is there, my e-mail is there, if
10 you have any contracting questions.

11 The actual solicitation, as you probably all know,
12 is on the web site. You can go there at any time and
13 look at it, if you have registered. And you all need to
14 register, because the important thing of it is if an
15 amendment comes out, an e-mail message will come out to
16 everybody that's registered that there is another
17 amendment. So that will save you a few phone calls. So
18 if you haven't registered on-line, you need to.

19 That's all, and I want to thank you all for coming

20 to our pre-proposal conference. And if you have any
21 questions, again, you can submit the questions in
22 writing after the conference to me. Make sure you put
23 your company name and your individual name on the list
24 of questions. You can ask them right here when we come
25 back off of the tour.

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1 MR. FUGLESTAD: Mike Fuglestad, J.J. Henderson.
2 Can we have extra copies of these handouts that you
3 have?

4 MS. GARY: We will make some more. I ran out.
5 Could you repeat your name and company name.

6 MR. FUGLESTAD: Mike Fuglestad, of
7 J.J. Henderson, F-u-g-l-e-s-t-a-d.

8 MS. GARY: Does anyone else have any questions
9 so far?

10 MR. NAKAMOTO: That web address that you see,
11 when you access it and you don't get a response,
12 sometimes we're updating it, so you need to keep trying.
13 We do our best to have it up and running, but yesterday
14 when I tried it several times, it wasn't working. So
15 you just need to keep trying.

16 We're going to take a break right now. And there
17 was no question, but I just want to let people know that
18 if you have looked at the proposal and have seen the bid
19 schedule, and it is clear in your mind as to what is
20 intended, that's okay. But if you would like to have
21 some explanation, we're here to do that.

22 Is that okay?

23 MS. GARY: That's great.

24 MR. NAKAMOTO: Because I don't know how many of
25 you have looked at it, but we do have a number of

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1 options, and there's reasons for that.

2 MS. GARY: I've thought of something else that
3 I need to tell everyone.

4 There will be absolutely no questions or side
5 discussions on the tour. If you, again, develop
6 questions going through the units, jot them down. We
7 want everything recorded.

8 Sorry, Jim.

9 MS. LEMEROND: I do have one question.
10 Gentry Lemerond, G-e-n-t-r-i-e, L-e-m-e-r-o-n-d, with
11 Enterprise Electric. On the site plans of the
12 electrical drawings, the site is broke up into different
13 alternates, bid alternates, A, B, C, and the base bid,
14 and the bid schedule does not reflect that.

15 MR. NAKAMOTO: It has alternates written on it?

16 MS. LEMEROND: Yes. The electrical site plan
17 does.

18 MS. GARY: We'll take a look at that.

19 MR. NAKAMOTO: We'll take a look at it, because
20 that may be in conflict. Thanks for bringing it up.

21 MR. LAKE: I've got a similar question. I'm
22 Jim Lake, with Swank Enterprises. I couldn't find
23 where -- which bid item for all the landscaping,
24 irrigation. Does that lump in with all the utilities?

25 You know, I don't know quite where they break, what goes
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1 into what bid section.

2 MR. NAKAMOTO: At the present time, the bid
3 schedule addresses what areas those are covered under.

4 MR. LAKE: I didn't see it.

5 MR. NAKAMOTO: We have it recorded, so we'll
6 take a look at it.

7 MS. GARY: Yeah. We'll provide an answer to
8 that for clarification in the amendment.

9 MR. NAKAMOTO: If you didn't see it, then we'll
10 take a look at it.

11 MR. JOHNSON: Just a point of clarification.

12 Now, the written questions that you submit to us, we
13 will try and answer those this afternoon to the best of
14 our ability at this meeting. However, all of the
15 questions will be published and answered with the
16 amendment, which will contain the reporter's transcript
17 of these proceedings, and along with any technical
18 amendment changes that may be required after you've
19 asked your questions.

20 Because even though we go through this document two
21 or three times, it's not until you, the contractor,
22 looks at it that you point out the real problems with
23 it. And we appreciate your efforts, because we do try
24 and get it right, but we know that it is the people that
25 are doing the work in the field that usually give us

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1 their best review, and there always is an amendment or
2 two required after that.

3 Thank you.

4 MR. NAKAMOTO: If there aren't any questions,
5 we would like to take a ten-minute break. We will be
6 back at 5 after 10.

7 MS. GARY: For those of you who came in late, I
8 do have a sign-in sheet going around. And let me know
9 if you need a copy of the slides, and we'll make some
10 more.

11 (A recess was taken from 9:55 to 10:10 a.m.)

12 MR. NAKAMOTO: We want to reconvene.

13 Okay, I guess we're going to continue with where we
14 left off, if anybody has any questions. Does anybody
15 have any questions concerning what we covered earlier
16 this morning?

17 MR. IHDE: I have one. Mark Ihde, with
18 J.J. Henderson; last name, I-h-d-e. On the previous
19 contractor that had the project, was there a list of
20 RFIs, anything like that, available, or was that all
21 incorporated into the new plans or specs?

22 MR. NAKAMOTO: The previous project was
23 actually terminated for convenience, and so all the
24 documents are from the previous contract; and all of
25 that information was incorporated into the project, and

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1 the project stands alone.
2 Any other questions?

3 MR. MILLER: Mark Miller, IRS Environmental.

4 On your Davis-Bacon wage here, where do the asbestos
5 abatement and the lead abatement, what category do they
6 fall under as far as the wages go for Davis-Bacon?
7 MR. NAKAMOTO: I'll have to refer that question
8 to Nancy Gary when she comes back, so if you don't mind
9 waiting?
10 MR. MILLER: Okay.
11 MR. NAKAMOTO: Any other questions?
12 What I'd like to talk about next is the bid
13 schedule. Let me ask, how many of you saw the bid
14 schedule, physically saw the bid schedule?
15 Okay. So is it understood what the intent is for
16 the base and the options?
17 You all understand, right?
18 Ask a question, because if you don't, I want to
19 explain something.
20 MR. FUGLESTAD: Mike Fuglestad, again, with
21 J.J. Henderson. I understand the intent, but there was
22 a question earlier as to what parts of some of the work
23 belong in what bid items. That was a question I had as
24 well, like landscaping and some of the site work.
25 MR. NAKAMOTO: Duane, do you want to talk about
0019 that landscaping thing?
1 MR. JOHNSON: Well, at this time, one thing
2 that -- Your bid item No. 2, which reads, "Provide all
3 labor, materials, equipment, and transportation for the
4 tot lot and adjacent areas within ten feet of
5 buildings," and they name two buildings, 4027 and 4028.
6 This particular bid item is going to become an optional
7 item. It will be moved down into the optional category,
8 and we'll pick up the common area seeding and
9 irrigation, the landscaping, in that bid item and it
10 will become an optional bid item.
11 MR. NAKAMOTO: Does that answer the question?
12 MR. FUGLESTAD: What about the handicap ramps?
13 Are there some handicap ramps?
14 MR. NAKAMOTO: There are no handicap
15 requirements for the project.
16 MR. LAKE: How about all your sidewalks?
17 MR. NAKAMOTO: We'll have to answer that later.
18 MR. LAKE: I'm Jim Lake, with Swank, again.
19 The walks is one thing I was kind of wondering about,
20 and I forgot the other thing I was going to ask. I'll
21 get back to you.
22 MR. NAKAMOTO: That's okay. You people are
23 very complacent, so we might have to stretch this out.
24 What was the question again, sir, about the
25
0020 sidewalks?
1 MR. LAKE: Which bid item they go into.
2 Oh, now I remember the other question. You've got
3 all your optional items, and you've got one item for
4 building. So you can take any one or all of the
5 buildings you have in that optional item; is that
6 correct?
7 MR. NAKAMOTO: (Indicating affirmatively.)
8

9 MR. LAKE: Reroof buildings, five buildings
10 listed, and then you've got a price per building. So
11 you could take one building and not any of the others.
12 You could take up to 120 days to award one more or two
13 more; in 90 days, decide you want to add another one, on
14 any one or all of those options. Is that correct?

15 MR. NAKAMOTO: That's correct.

16 MR. LAKE: Okay.

17 MR. NAKAMOTO: So let me clarify it a little
18 bit more, to make it more palatable. When you look at
19 the options, you're going to find that under each
20 option, there is a certain amount of work to be done;
21 and when you look at it holistically, you could not
22 construct one without having the other.

23 As an example, if you were to do the basement, you
24 couldn't do that unless you had an addition. So if you
25 had an addition, you could do a crawl space or you could

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1 have an option with a basement. That's the reason for
2 the option, the way it's set up.

3 The moneys are going to be the deciding factor as
4 to how we award the options. So if you clearly read the
5 options, on an example, a building, whether it's roof,
6 addition, or basement, you will find that it's
7 categorized according to the model number, because they
8 represent the exact same footprint. We did not mix it
9 up. And when we ask for an option for a roof or a
10 basement, the number referred to is always the same for
11 the models that are included in it.

12 And then on the not-to-exceed, we have identified
13 the number and each building type and the dollar value
14 with a not-to-exceed total. This way, as an example, if
15 a house or an addition was to cost \$100,000 and we had,
16 say, 5 buildings, 5 times 100,000 is 500,000. Supposing
17 we had moneys only for 400,000. So then we would decide
18 which building we would accept up to the maximum. So
19 obviously, we couldn't get all five, but we can get
20 four.

21 How we would select the four is according to how
22 the site plan is laid out. We want to have it grouped.
23 We don't want to have, you know, an isolated building
24 all by itself. So we're going to select it as though
25 we're going to build a community, because the models are

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1 scattered. Okay?

2 I probably made it more complicated, but it really
3 isn't. If you look at the site plan, you're going to
4 find that the models are scattered around, it's not all
5 grouped into one.

6 Any other questions?

7 MR. JOHNSON: I have a question for you. I'm
8 playing devil's advocate here for a moment.

9 MR. NAKAMOTO: Okay.

10 MR. JOHNSON: We have item No. 9, which is to
11 reroof buildings. We have six buildings listed, and we
12 have a price, a unit price. Now, if the unit price,
13 say, I, as a contractor, might decide the unit price per

14 building -- and this is certainly off the top of my
15 head, it doesn't reflect any real cost. You have to
16 work that problem.

17 But say I decide that it will cost 20,000 per
18 building to reroof these buildings. But the
19 not-to-exceed, then I would put down 120,000, okay;
20 6 buildings, 20,000 per building. And you only have
21 100,000, so you will award 5 of those 6 buildings, if
22 you decide to spend 100,000.

23 MR. NAKAMOTO: That's correct.

24 MR. JOHNSON: So the not-to-exceed reflects six
25 times my per-building cost.

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1 MR. NAKAMOTO: That's correct.

2 MR. JOHNSON: But now, what if I decide that I
3 can do all six buildings much cheaper than I can do a
4 lesser number? So now, I'll say it will cost 20,000 per
5 building, but if I can get all 6 of them, I'll do it for
6 100,000, so not to exceed 100,000, or say 105,000. So
7 if I get all six of them, I'll do them for 105,000.

8 Can I bid it that way?

9 MR. NAKAMOTO: No. The not-to-exceed stands by
10 itself, and Contracting has determined that the only way
11 to get this awarded is to use the total not-to-exceed
12 with a base cost for each item. In other words, no
13 discounts.

14 MR. JOHNSON: Okay, very good.

15 MR. NAKAMOTO: Any other questions?

16 Our Contract Specialist is checking to see if the
17 survey has been included in the new web site, so as soon
18 as she comes back, she'll talk about what we require for
19 the criteria.

20 From a technical management standpoint, am I
21 allowed to say anything right now?

22 MR. JOHNSON: It will all be in the record, so
23 you can go ahead.

24 MR. NAKAMOTO: So let me kind of explain the
25 spec for criteria. The reason why we're doing this is,

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1 we would like to get the best value, not necessarily the
2 low bid. And it's dependent upon your experience and
3 your qualifications for those people that we are asking
4 for, and that will include the project manager and the
5 superintendent. Now, you're going to have other people
6 that you're going to include, but we are not going to
7 rate those folks.

8 As far as the company is concerned, we are asking
9 that you look at your relevant experience, relevant
10 projects. We do not want to do that, we want you to do
11 that. We want you to tell us what relevancy and what
12 qualifications that your survey is going to want to tell
13 us. And that information will be submitted directly to
14 Contracting in the sealed envelope, and the evaluation
15 is based on it, along with the price.

16 So that is materially different from perhaps what
17 you've all been looking at, low bid. So if you want to
18 have a discussion, we'll entertain it right now, but I'm

19 going to have him answer it. Any questions?

20 Go ahead, sir.

21 MR. LAKE: When Nancy was talking and the slide
22 was up, it sounded to me like the slide was saying
23 something different than what she was saying over
24 whether price has more effect on the award, or the
25 technical qualifications. I thought the slide said that

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1 all of the technical qualifications shall not in sum
2 exceed the value of the price, or something like that,
3 and then she said kind of the opposite.

4 MR. JOHNSON: Generally, price is not an
5 evaluated item. It doesn't carry a weight, other than
6 to the extent that we cannot award over the dollar value
7 that we have. If we have the moneys to award up to a
8 dollar value, a certain dollar value, then any price
9 that exceeds that dollar value, we cannot make an award
10 to generally.

11 Is that true on this project?

12 MR. NAKAMOTO: That's correct.

13 MR. JOHNSON: There was a time when we could go
14 over a certain percentage and those moneys would be made
15 available, but in today's economy, that is not true.

16 MR. LAKE: Well, I'm just wondering how you
17 decided. If you've got two qualified bids, one is a
18 little more qualified than the other, but the
19 less-qualified guy is that close (illustrating), but
20 maybe \$500,000 less in total, how do you figure out how
21 you're going to do it?

22 MR. JOHNSON: That's what we pay some
23 evaluators to do. They sit there and they decide which
24 would be in the best interest of the Government: Should
25 we spend the extra money and take this firm, or shall we

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1 save some money here and go with the other firm? And it
2 has to be an award which is --

3 MR. LAKE: It's somebody's judgment call, then.

4 MR. JOHNSON: -- is made in the best interest
5 of the Government, and that is a judgment call. I mean,
6 what more can I say?

7 MR. NAKAMOTO: So to expand on that answer, we
8 used to do a numerical value. The problem with a
9 numerical value is it may be easier, but it doesn't
10 satisfy what the Government has decided -- and it's not
11 the Corps, it's the Government throughout that has
12 changed it. So it's covered under the Federal
13 Acquisition Regulation, the FAR. And we use the
14 adjectival means of scoring. Which means we take your
15 narrative, and there's a group of people that have
16 understood the contract, what is required and what it
17 takes to make a successful project based on the criteria
18 that's published.

19 So Nancy will have more questions you can ask of
20 her. She's more specific in that.

21 MR. JONES: I've got a question. I'm Wade Jones,
22 with Caddell Construction. On page 9 of your handouts
23 and your slide show, it's got the experience, past

24 performance, qualifications, they're all on a list. Is
25 there any value to that list, other than -- I mean, is

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1 it chronological, or is it just a list?

2 MR. NAKAMOTO: I would say that Nancy Gary,
3 when she comes back, she can answer that much better
4 than what I could.

5 Duane, did you want to add something to that?

6 MR. JOHNSON: Well, what she had on the list
7 should have followed what's published on page 00100-i.
8 It begins there, "Technical evaluation criteria," and in
9 the introductory paragraph, it says that the criteria
10 are listed in descending order of importance and are
11 comparatively equal in importance. Now, comparatively
12 equal, but they're still descending order of importance.

13 So if you look at experience, and then look down
14 the list, say, to organizational structure, then
15 experience is more important than that you did your
16 organizational structure exactly the way we want to see
17 it.

18 MR. NAKAMOTO: And, you know, when you look at
19 the criteria, it's important to understand what is
20 wanted. Because like Duane said, the level of
21 importance, the weight of it, is critical. That is what
22 you are evaluated upon. And, you know, I don't know if
23 you can say it's high-tech or not. I mean, certainly,
24 it's not high tech.

25 It's the manner how we choose to evaluate what we
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1 see as getting the project to a successful completion.
2 And there's very different ways that you can divide up
3 the subdivision in doing that. And so in this case, we
4 have decided because of the complexity, as we see it, at
5 the site, this would give us the better option as to how
6 we would procure.

7 That's the best answer I can give you from a
8 noncontractual standpoint. You know, if we were
9 starting a project which had different circumstances, it
10 may be structured differently. I think when you see the
11 site, if you're not all familiar with it, you're going
12 to understand why we rated the criteria as we did. And
13 Nancy can probably give you maybe some additional
14 information.

15 I will tell you right now, though, I guided in how
16 we are to procure this. It wasn't all myself, but I
17 studied -- we studied what the project looks like,
18 studied the time frame that we had, studied the dollars
19 we had available, at that time and today. We studied,
20 you know, what the season would look like. You know,
21 this is already February. And so that's how we decided
22 that we will approach it.

23 I mean, I know these are all words to you, but
24 that's my adjectival way of saying that's how we set it
25 up. I mean, there's no magic.

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1 MR. JOHNSON: So going back to what you were
2 asking about, the list of items that we're looking at,

3 we look at experience and past performance as being the
4 two top items.

5 And quite often when we do a project, we'll go out
6 and ask for pre-qualifications and we'll get maybe up to
7 five firms, and then we look at that. And once we've
8 put people into the pre-qualified arena, then we would
9 ask for more technical matter as to how we would award,
10 because we would feel comfortable with any one of these
11 contractors in that pre-qualified group.

12 But on this project, we felt that there were
13 probably a number of contractors in the area that might
14 be qualified. And to open it up more, we thought, well,
15 let's look at their experience and their past
16 performance. And we've pretty well defined what it is
17 we expect to see in the way of quality, materials, and
18 work should be well-defined.

19 So then we need to look at those items; and then
20 your schedule, of course, and organizational structure,
21 then comes down the line. And the last item, which
22 can't be ignored, but is much less of a factor, is the
23 small and small disadvantaged business participation
24 that we like to see on our projects.

25 And then those things are evaluated, and then we
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1 look at the price. The evaluators up to that point do
2 not see the price. Our contracting people then look at
3 the price. And if there's a situation, such as the
4 gentleman over here was speaking of, where you have
5 almost equal qualified people and the price is very
6 close, then the people that look at the technical
7 evaluation would be called back in to also discuss price
8 and see which firm they should award to that would be in
9 the best interest of the Government at that time.

10 MR. NAKAMOTO: And I believe at that point, we
11 would ask the question of those within the competitive
12 range, the same question.

13 Right?

14 MR. JOHNSON: That could be, yes, if we go out
15 for questions.

16 MR. NAKAMOTO: Right.

17 MR. SHANKS: Vic Shanks, Great Plains
18 Insulation. I have a question on that evaluation
19 factors for award, the last thing you just said, extent
20 of small and small disadvantaged business participation.
21 Would you define that a little bit, what you consider
22 small business and small disadvantaged business?

23 MR. NAKAMOTO: Nancy really should answer that
24 question, but it has a historical -- history on your
25 revenue. But she would be the best person to answer

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1 that question.

2 I think you had a question.

3 MR. DIDRIKSEN: Derek Didriksen, from
4 Dick Anderson Construction. My question is regarding
5 the fact that proposals and the price need to be turned
6 in at the same time.

7 If I'm understanding the requirements correctly,

8 our small business participation plan is essentially a
9 list of subcontractors, a complete list of
10 subcontractors showing the percentages of work that each
11 of them complete on the project. And, you know, we've
12 got to have five copies of the proposal in Seattle, you
13 know, ready to turn in on bid day; and yet, we're going
14 to have a real hard time getting our subcontractors to
15 even get us numbers prior to bid day. And in order to
16 accurately fill that out, it almost seems like we should
17 have a 24-hour time period to allow us to accurately do
18 that.

19 MS. GARY: Are you a large business?

20 MR. DIDRIKSEN: Yes.

21 MS. GARY: That has to be submitted, if you are
22 a large business.

23 MR. DIDRIKSEN: It has to be submitted with any
24 business, a participation plan, correct?

25 MS. GARY: The subcontracting plan, we're

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1 talking about? I just walked in on the discussion.

2 MR. DIDRIKSEN: Yeah, the subcontracting plan
3 actually with the proposal and the bid.

4 MS. GARY: For large businesses only, yes. You
5 have to have those --

6 MR. DIDRIKSEN: So we have to provide --

7 MS. GARY: The goals, the percentages.

8 MR. DIDRIKSEN: -- a complete list of
9 subcontractors.

10 MS. GARY: It has to be completed, yes.

11 MR. WADSWORTH: My name is Cliff Wadsworth,
12 Wadsworth Builders. Are you saying that a small
13 business does not have to?

14 MS. GARY: Provide a subcontracting plan,
15 right.

16 MR. DIDRIKSEN: But they do have to provide the
17 participation, don't they?

18 MS. GARY: They have to -- There's a criteria,
19 No. 5 or 6, where they provide the percentages.

20 MR. DIDRIKSEN: Right, and that's what I'm
21 talking about. In order to accurately do that --

22 MS. GARY: It's not the plan.

23 MR. DIDRIKSEN: -- it's going to be very
24 difficult for the general contractors to do that, unless
25 we can get all the subcontractors to give us their

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1 prices a day ahead of time.

2 MS. GARY: To the best of your ability, provide
3 that information. And we've made it significantly less
4 important. So we will not lose good contractors because
5 of, of percentage goals not being provided, or...

6 MR. DIDRIKSEN: It's going to be hard to put
7 the information together in the time.

8 MR. NAKAMOTO: Who needs copies of the slides?

9 MS. GARY: But the plan is significantly more,
10 if I'm understanding that.

11 MR. DIDRIKSEN: The plan is no problem. It's
12 the one we're actually doing.

13 MR. JOHNSON: We had a question over here
14 (indicating) on the small business while you were out.
15 Could you restate your question?

16 MS. GARY: And I may have to refer that
17 question to our small and disadvantaged expert back in
18 the office, because we have one particular person that
19 works on that full time. But, please, for the record.

20 MR. SHANKS: I'm Vic Shanks, Great Plains
21 Insulation. My question is, what do you consider small
22 businesses that are disadvantaged? What do you
23 consider?

24 MS. GARY: It's a program, and I am not
25 familiar with it. We'll have to address that later or
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1 refer you to SBA for a full breakdown of what it means
2 to be a small disadvantaged. It's a program that they
3 go through, through SBA.

4 MR. LAKE: When we submit the subcontracting
5 plan, it doesn't have to list every individual
6 subcontractor that we're going to use, does it? It's
7 just the goals that we're planning to meet.

8 MS. GARY: Goals. And for clarification, look
9 at the letter that was incorporated with the
10 solicitation. It should tell you exactly what you have
11 to submit.

12 Again, I get that from the representative for small
13 and disadvantaged businesses, and they provide that
14 letter, I put it in there. So it should spell out step
15 by step what they're looking for you to provide.

16 MR. NAKAMOTO: There was another question for
17 Nancy Gary. Was there a question -- Did we answer that
18 Davis-Bacon thing?

19 MR. MILLER: No. That was my question.

20 Mark Miller, IRS Environmental. I was wondering,
21 on your Davis-Bacon wage, where does the lead abatement
22 and the asbestos abatement, what category do they fall
23 under, out of curiosity?

24 MS. GARY: I'd have to look that up and
25 research it and provide that.

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1 MR. MILLER: Because I've noticed these last
2 couple jobs.

3 MS. GARY: And we'll provide that for you.

4 MS. MILLER: Okay, thank you.

5 MS. GARY: I do have extra copies, or did you
6 hand them out?

7 MR. NAKAMOTO: I handed them out.

8 Anybody who wishes extra copies can have one.

9 MS. GARY: I went over to the office to make
10 sure. There are two amendments so far on the
11 solicitation. One went out Monday, and it was brought
12 to my attention that my Section 100, Intro, refers to
13 this customer survey form for past performance
14 (indicating). We inadvertently left it off, and so we
15 put it back in with amendment on Monday.

16 What you need to do for your past performance
17 criteria, you need to get this (indicating) to your

18 references right away, because the references have to
19 provide it back to Seattle at least by the time that the
20 proposal is due. And we've tried to make it as
21 simple -- you know, as simple as possible; you know, a
22 matter of just circling the evaluation. And that survey
23 comes back from the reference, not from you, before the
24 proposal time.

25 MR. JOHNSON: Just a note of caution: If you
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1 provide this to one of your customers, and you provide a
2 stamped envelope with it for them to send it back, just
3 make sure that it's not one that has your return address
4 up in the corner, because then our contracting people
5 think that you mailed it in yourself, and they like to
6 see it come from the person that filled out the form,
7 not the contractor himself.

8 MR. WIDVEY: Did you ask for three of those,
9 was that the three referrals?

10 MS. GARY: Under the criteria, I think we made
11 it three. I'd have to double-check that. It's in the
12 Section 100, Intro, under the technical evaluation
13 criteria.

14 Three, yes.

15 MR. WIDVEY: You don't want no more than that,
16 no less, or is that just minimum of three?

17 MS. GARY: Minimum of three.

18 MR. JOHNSON: It says minimum.

19 MS. GARY: And there is, I think I put a
20 restriction in there on how many pages the proposal --
21 Under Paragraph 5, proposal contents, we put a minimum
22 of how many pages. "The number of pages of proposal
23 shall be 30 maximum." I'm sorry, not minimum, maximum.
24 And then anything after 30 won't be looked at or
25 counted. That does not include the survey and all that,

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1 that's the rest of it.

2 MR. NAKAMOTO: So my suggestion is, get your
3 best survey in.

4 MS. GARY: Those surveys that your customers
5 mail back to us, they can be faxed or mailed or hand
6 delivered, but for time purposes -- and it would prove
7 that it would come from your customer.

8 MR. WIDVEY: It can be faxed.

9 MS. GARY: It can be faxed.

10 Make sure that they put on there or you provide
11 them which solicitation, because we've got a bunch going
12 at once and it would be difficult to figure out which
13 goes with which.

14 MR. NAKAMOTO: Are there any other discussions
15 or anything that you would like to talk about right now?

16 MR. SHANKS: I'm Vic Shanks, Great Plains
17 Insulation. I have a question for Nancy.

18 Is there any protection for the small businessman
19 when he makes a bid to a contractor? Does my bid go in
20 with that contract? Sometimes -- I bid a lot of work,
21 and contractors get it, and I think after they get the
22 job, then they start shopping around for a lower price

23 than mine. And I was just wondering if there was any
24 protection for the small contractor at all.

25 MS. GARY: That might be a question that we
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1 could pose to our small and disadvantaged rep back in
2 our offices. As far as I know, we deal with the prime,
3 and the business that goes on with primes into the sub,
4 we do not deal with. But there may be some additional
5 information we can give you on that. I'll leave that
6 for later, too.

7 MR. WADSWORTH: My name is Cliff Wadsworth,
8 from Wadsworth Builders. If we write down that we're
9 going to use a particular sub, and then down the line,
10 if we want to change, is there any way to change subs?

11 MS. GARY: Did we address that?

12 We'll research that and get an answer for that,
13 too. There's a lot of things that we can't answer
14 today, but I will get an answer for you on record. I'd
15 have to take a look at the solicitation and see if it's
16 included.

17 Only if we get involved with teams, but I'd have to
18 check the solicitation and answer that later.

19 MR. NAKAMOTO: I can tell you, on the
20 design/build, we ask for, like Nancy says, a team. And
21 whenever you make a change, it has to be approved by the
22 contracting officer's rep prior to implementing, because
23 the whole evaluation was based on the team that was
24 submitted and not on anybody else. So obviously, if you
25 select, you know, a team and you change, then the

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1 evaluation could change. But in this case --

2 MS. GARY: In this case, I believe the prime is
3 responsible for his subs.

4 MR. NAKAMOTO: That was a very good question,
5 though. If you were a sub, if I was a sub, major
6 problem, if, you know, you do a lot of work and it
7 wasn't honored.

8 But I guess, Nancy, you will research that question
9 and answer it officially.

10 MS. GARY: Yes.

11 MR. JOHNSON: We look at your experience and
12 your past performance as a contractor and perhaps trust
13 your judgment as to who you select as subs, that you'll
14 perform on our project at a level that you've performed
15 on other projects that you've referenced and given us
16 information on.

17 MR. WADSWORTH: I guess kind of what I'm
18 referring to, sometimes a sub will give you a price and
19 then after the fact, he's going to come back and say,
20 "Oh, I didn't have that in it." So then where do you
21 sit if you use his price and somebody else was actually
22 cheaper when you considered him? I mean, if you use his
23 name, where do we stand with that?

24 MS. GARY: That is your concern, yeah. We
25 can't change the -- you can't change your prices later,

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1 so it would be your business to go out and find another

2 competitive sub.
3 MR. JONES: Wade Jones, with Caddell, again. I
4 guess somewhat of a question: The general is going to
5 be held accountable for the final product, right? I
6 mean, so we have to have --
7 MS. GARY: The prime is, yes.
8 MR. JONES: -- some control over it. So we
9 have to have some control over it, you know, say
10 unsatisfactory work or something like that.
11 MR. JOHNSON: Exactly.
12 MS. GARY: And the prime would be responsible
13 for it.
14 MR. WIDVEY: Do you have a budget number, you
15 know, how much money you have to spend?
16 MS. GARY: Not on this project. We give you a
17 range only on this. We don't give a budget as in
18 design/build. We're just dealing with a range.
19 MR. NAKAMOTO: If there are no further
20 questions, then the agenda calls for lunch starting in
21 about one hour. We can probably entertain suggestions
22 as to what we could do, so is there a suggestion as to
23 what perhaps you'd like to see, do, or talk about?
24 MR. LAKE: Can we go look at the buildings?
25 MR. NAKAMOTO: We can do that. I'll have to
0041
1 check to see if the bus is available, because you all
2 need to be escorted, and it is pretty much of a hike to
3 the site.
4 MR. JOHNSON: You'd scheduled for the bus for
5 what time?
6 MR. NAKAMOTO: For the site visit, we're going
7 to have some lunch, and the bus is about 10 to 12. If
8 we want to, we can probably forgo lunch and do the site
9 visit at that time. I can make changes to the schedule.
10 And Nancy, we can come back and reconvene on that
11 site? Is that kind of what you're thinking? I mean, is
12 that okay to do?
13 MS. GARY: If we could arrange for the bus
14 earlier, that would be a good thing.
15 MR. NAKAMOTO: Why don't we just take a
16 ten-minute break, give me a chance to make a phone call,
17 we'll reconvene, and we will have a revised agenda.
18 UNIDENTIFIED SPEAKER: Not everybody has to be
19 shuttled on that bus, do they?
20 MR. NAKAMOTO: If you have a pass, you know,
21 you're free to go about. But those that came on the bus
22 and do not have a pass, you're under escort. I believe
23 that's correct.
24 Alan, is that generally correct?
25 MR. KORSLIEN: Yes.
0042
1 MR. LAKE: Are the buildings open now?
2 MR. KORSLIEN: We'll probably have to pop some
3 panels off the doors. I've got a screw gun with me.
4 MR. NAKAMOTO: It was supposed to be open at
5 10 o'clock this morning. I said that we might have a
6 revised agenda. But I'm going to have to ask Nancy to

7 see if that kind of a site visit could be arranged.
8 MR. MACKIN: Rick Mackin, of Rick Mackin
9 Construction. Are you going into all three separate
10 units?
11 MR. NAKAMOTO: We're going to allow you to go
12 into any one of those 22 buildings that you wish to get
13 in, unless we don't have a key.
14 MR. KORSLIEN: Anything that's got the wafer
15 wood on it, basically, I think it's just a got hinged
16 plywood and we're just going to pop it.
17 MR. MACKIN: So you're going to go into the
18 ones that are demoed and the ones that aren't demoed
19 both, so you can see before and after?
20 MR. NAKAMOTO: That's correct.
21 What I've arranged for was that we would drop
22 everybody off at the very first house, which is the most
23 demolished, and then the bus would meet us halfway up,
24 so we can move as a group, and then go into ones that
25 are intact. As a matter of fact, the lights are working
0043
1 and persons can draw. You know, I mean, you can move
2 into it. So you're going to see what it is today and
3 what it is after they've taken some stuff off, so you
4 can physically see what's inside after the wall boards
5 have come off and what the floors look like after the
6 covering has come off.
7 So I would say that, for all practical purposes --
8 and if I was in it, I would want to see each one, how it
9 was configured. Maybe you want to take some kind of
10 notes over there, so you can remember what you saw
11 perhaps. You can't discuss it, though. You can discuss
12 among yourselves, but you can't have a big discussion,
13 is all I'm saying.
14 MR. JOHNSON: Are you going to try and get -- I
15 need to understand what's going on here. Are you going
16 to try and get the bus?
17 MR. NAKAMOTO: I'm going to try to get the bus.
18 We need to take a ten-minute break, give me a chance to
19 do that. If not, then we'll have to play hopscotch or
20 something until we get this thing arranged. We can
21 forgo lunch. Like I say, we'll take a vote.
22 MS. GARY: Well, initially, I think the bus was
23 scheduled for 1 o'clock.
24 MR. NAKAMOTO: 1 o'clock.
25 MS. GARY: And so I vote for forgoing lunch and
0044
1 see if we can go on the tour sooner. Does the group
2 agree?
3 (General agreement.)
4 MR. NAKAMOTO: And the whole idea was, after
5 the site visit, we would gather again in here, at which
6 time you will bring your questions up and we can answer
7 them for what you have just seen.
8 MS. GARY: And hand them in, if you like. If
9 you don't want to ask them now, if you feel it will take
10 a little research on our part to look up what's in the
11 solicitation, just write them out, put your name and

12 company name on it and hand it in, and they'll be
13 included in the amendment that will be published to
14 everyone.

15 MR. NAKAMOTO: So then the reporter will then
16 take down questions, and everyone will hear what the
17 other person said.

18 MR. WIDVEY: I have one more question.
19 Reid Widvey, of First Dakota Enterprises. What's the
20 security like getting on the base? Since September 11,
21 it's taken us a long time to get on base.

22 MR. KORSLIEN: Alan Korslien, Corps of
23 Engineers, Malmstrom. Once you have your contractor
24 pass -- which basically, the prime contractor would give
25 a letter to whomever the individual is that needs a

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1 pass, they'll come to our office. There's a form you
2 fill out. You take that up to Pass & ID, which is the
3 building just outside the main gate, and you'll get your
4 pass.

5 Now, once you have that, basically coming in in the
6 morning, they're doing a hundred percent ID check, so
7 they'll want to see your contractor pass. Delays are
8 fairly minimal, and they're pulling off a car at random.
9 Every now and then, you'll see they'll search a vehicle.
10 But lately, generally, you're only looking at five, ten
11 minutes, if that, to get in.

12 MR. WIDVEY: When we were at Grand Forks, it
13 would take an hour or two hours. I was just concerned
14 of a time delay, if you have to take an hour to get
15 through your vehicle, if they have to check your
16 vehicle.

17 MR. KORSLIEN: No, the delays are reduced.
18 Right after September 11th, it would take two, three
19 hours, and they were searching every vehicle. But
20 that's more the exception now than the rule.

21 MR. LAKE: We don't need to anticipate that on
22 this job?

23 MR. VERNON: Bob Vernon, VQC. How about a drop
24 site for your trailers and stuff? I know we've had kind
25 of a problem up here trying to get a spot to drop.

0046

1 MR. KORSLIEN: We would establish a
2 contractor's staging area. Most likely, it will be up
3 close to the housing project itself. There is a large,
4 open field up there, and the previous contractor was set
5 up in that area, and we'd anticipate we'd put the
6 contractor there as well.

7 MR. VERNON: How about like for other
8 contractors, like electricians and stuff? They've got
9 their trailers and everything. Is there going to be
10 room for them?

11 MR. KORSLIEN: Well, pretty much, we'd try to
12 keep everything yarded up in as compact an area as we
13 could. But they would be allowed to be on the site as
14 well.

15 MR. JOHNSON: Do we have any other questions?
16 While Jim is making his phone call to see if he can

17 arrange transportation earlier than originally
18 scheduled, let's take about a 15-minute break, if you
19 don't mind.

20 (Recess was taken for the site tour from 11:00 a.m.
21 to 1:50 a.m.)

22 MR. NAKAMOTO: Okay, I guess the meeting is now
23 in session.

24 MS. GARY: I had the opportunity to call back
25 to Seattle and talk with the small business rep adviser

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1 there, and she gave me a little bit more information
2 which I'll share with you.

3 There were two questions, first of all, before I
4 get to that, submitted by Alex Jack, from Pacific West
5 Construction, having to do with reps and certs: "Do the
6 reps and certs get submitted with tech and price
7 proposal?" The answer is, yes, definitely.

8 Another one from the same company, another
9 question: "If Davis-Bacon wage changes prior to
10 contract award, will the contract amount be adjusted?"
11 And basically, what happens is, just prior to award,
12 we've gone through the evaluation process, we've had, if
13 needed, discussions or clarifications, and we're ready
14 to award, and let's say the Davis-Bacon changes that
15 day. We will go ahead and contact the contractor by
16 letter and ask him -- first of all, inform him that it's
17 changed and ask him if it affects his price.

18 If the answer is no, then we're great. If the
19 answer is yes, then it could affect the whole process of
20 the best value situation. In other words, we'd have to
21 stop and go back out to the contractors that were in the
22 range and ask for the difference. Hopefully, the answer
23 is no, that it doesn't affect it. But it could, because
24 the Davis-Bacon has been changing weekly; not so much
25 for Montana, but especially in Seattle, it's been

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1 changing every week. So we will definitely check it.
2 And this is only for RFPs now; for bids, it's different.
3 With bids, we just check ten days prior to award and
4 that's it.

5 Then I found out some more clarification on the
6 whole subcontracting plan. As everyone knows, large
7 businesses are required to submit a subcontracting plan.
8 And there's a letter in there from our representative
9 that covers each and every goal that's needed for each
10 category. But that doesn't preclude the fact that also,
11 small businesses need to have a plan. They don't have
12 to submit a formal plan, but they still have to have a
13 plan. And it goes back to that letter from our
14 representative, and it tells you the goals.

15 And she also suggested -- There were two things
16 that I thought of after you all left. One is our web
17 site now has all of the planholders listed there. And
18 up until a few months ago, you could go into that
19 planholders list, take a look at all the primes, all the
20 subs, and they even had the category they were in. They
21 could register that way, and at a glance, you could tell

22 if they were a hub zone or if they were a small
23 disadvantaged. I believe they took that away, but at
24 least it gives you, first of all, some local sources
25 that you could check out.

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1 The other way that you could do is SBA has a
2 terrific program that's in place, and I'll give you that
3 site. It's www.sba.gov, g-o-v as in government; and
4 then you click on "Search Criteria," and then Pronet is
5 the name of the program that they have in there; it's
6 P-r-o-n-e-t. And it's one of the big selections you'll
7 see under SBA's website.

8 And what that does is, you can select criteria by
9 area. Say if you wanted to stick with Montana, for
10 instance, then you can search for -- say if you're
11 looking for an electrical company, or grounds, or
12 whatever you're looking for, you can use that as a
13 search criteria. And then also, I believe they have the
14 category. Say if you're looking for a small
15 disadvantaged company, or whatever the category is that
16 you need to contact, and it would give you some sources
17 there.

18 So I hope that helps you.

19 MR. SHANKS: Yes, thank you.

20 MR. SHORTRIDGE: I have a question.

21 Ron Shortridge, Pierce Flooring. One of the gentlemen
22 that was here earlier, question was made about the subs
23 being listed and whether -- I didn't quite follow if it
24 was by percentage or by the subcontractor that was used
25 for that design.

0050

1 MS. GARY: I'll take a look at the question
2 when we get back and answer it along with -- to make
3 sure I've got the wording correct and answer the
4 individual question later.

5 MR. SHORTRIDGE: Okay.

6 MS. GARY: There's one other question, also
7 from Pacific West Construction.

8 MR. JOHNSON: And I'll take that one. It had
9 to do with the awarding of options, and it asked, "Is
10 the 330 calendar days for the base bid or is it
11 inclusive of any or all alternatives?" We don't have
12 alternatives, we have options, they're called in here;
13 although somebody did point out we may have that on one
14 or two of the drawings. We'll have to check that out.

15 But for the awarding of options, it's in
16 Section 800, under "Special Clauses," and it would be
17 under the SC1.1 option, for increased quantity. It
18 discusses under there the awarding of these options.

19 The Government has 120 days after the award of the
20 contract, or you've received your notice to proceed with
21 the contract, I should say, to award any optional items.
22 And then the -- it goes on, under a couple of the
23 subparagraphs in that SC1.1, and discusses the time for
24 completion. And the time for completion, as it reads
25 here, of the optional item awarded under this contract

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1 will be the same as for the base items and will be
2 measured from the date of receipt of notice to proceed
3 for the base items.
4 What that means is, this is a 330-calendar-day
5 contract, so we have 120 days in which to award any
6 optional items; but the completion of the contract is
7 the 330 days after the initial award. And that includes
8 any optional items that may be awarded during that time.
9 Any questions on that?
10 MR. WIDVEY: So it's 330 days.
11 MR. JOHNSON: 330-day contract period. Within
12 the first 120 days, we may award some other additional
13 work.
14 MR. WIDVEY: But that's still covered under the
15 initial notice --
16 MR. JOHNSON: That still has to be completed
17 within the initial 330-day period.
18 MR. NAKAMOTO: Are there new questions that
19 might have come up that weren't written down that we can
20 take right now?
21 MR. SHORTRIDGE: Ron Shortridge,
22 Pierce Flooring. I hate to bring this up, because every
23 time I do, I get in trouble, but I've got to throw this
24 out for the GCs that are here.
25 The carpet specifications in 9680, page 2, calls

0052

1 for a manufacturer of Shaw, calls for a color and a
2 pattern, which there is no pattern. And being aware of
3 that particular product, it's been discontinued for
4 two years. So they also call for an approved equal.
5 They refer to a product by the name of Highland Plush,
6 which is the product that is currently installed in the
7 original Capehart 1 remodel. That's manufactured by
8 Mohawk. It's also discontinued.
9 In addition to that, they're calling for an
10 attached cushion to this carpet, so you've now gone from
11 a standard running-line carpet to a custom carpet. And
12 I'd like to point that out only from the standpoint of
13 maintenance down the road. Let's say six months or a
14 year after the project is done, the maintenance people,
15 if there was a stain or they needed to replace the
16 dining room, for example, they could not get that carpet
17 manufactured in less than a 300-yard quantity.
18 And one more point is that there is no yarn system
19 referenced. And of course, there are good yarn systems
20 and there are bad yarn systems.

21 And I guess finally, would the specification be
22 held to the Air Force's requirements to meet Executive
23 Order 13101 for recyclability?

24 MR. JOHNSON: We appreciate your pointing that
25 out. We'll have to look into that. And the Air Force

0053

1 is very strict on green billing and recycling materials
2 and so forth, so I'm sure that would be the case, that
3 we would follow that directive.

4 MR. SHORTRIDGE: And if it's more convenient, I
5 could also submit that to -- Would that be a question

6 submitted to Techbid, then?
7 MR. JOHNSON: Yes. If you would, we would
8 certainly appreciate that, and we'll have that
9 clarified.
10 MR. SHORTRIDGE: Thank you.
11 MS. GARY: Are there any other questions?
12 MR. NAKAMOTO: Alan Korslien, did you have a
13 comment to make or statement to make?
14 MR. KORSLIEN: Yes.
15 For those that don't have -- Alan Korslien, from
16 the Malmstrom Corps office. For those that don't have
17 computer equipment or plotters to reproduce drawings,
18 Blend's Copy Shop, downtown, will print up however many
19 of the sheets that you need. I think that's the only
20 place I know of in town that does that.
21 MR. WADSWORTH: No. Image Tree does it.
22 They're in the old Johnson Control Building,
23 Ninth Street and Fourth Avenue, I think, North, South.
24 MR. NAKAMOTO: Those that came in late, we have
25 questions that we will take right now. If you have any,
0054
1 you can present them.
2 MR. WIDVEY: Who removes the OSB on the
3 buildings? Is that your guys's, the base's?
4 MR. KORSLIEN: That will be the contractor that
5 removes that. I think it's noted on the demolition
6 schedule as well.
7 MR. WADSWORTH: One other thing, we noticed
8 over there, it says the sheet rock is a hundred percent
9 demoed in some of the rooms. It's not a hundred percent
10 demoed.
11 MS. GARY: A hundred percent, what was it,
12 demo?
13 MR. WADSWORTH: Demo.
14 MR. NAKAMOTO: What was that question, again?
15 MR. WADSWORTH: Well, it says in the plans that
16 some of the buildings were a hundred percent demoed on
17 sheet rock and interior finishes, and that's not true.
18 MR. NAKAMOTO: That is, that is verified by
19 what you just saw, so, you know, the wording we put in
20 is an approximate. The condition you took a look at
21 today is the condition that verifies what we have, so...
22 MR. WADSWORTH: Well, I didn't go in every one
23 of them and write down all that kind of stuff, but I
24 would imagine if they tell you it's a hundred percent
25 demoed, you get in there and it's only 50, then they'd
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1 owe you 50 percent.
2 MR. NAKAMOTO: Well, I've said mine, so I'm
3 going to have Duane answer that one.
4 MR. JOHNSON: You control the money pot, I
5 don't know.
6 The AE that put the technical portion together for
7 us was over and did a survey and also was given
8 information; which if what he was given -- the
9 information he was given maybe wasn't, you know,
10 followed through on. Certainly, if we have changed

11 conditions, in my mind, that's grounds for a claim.

12 Back to Jim.

13 MR. NAKAMOTO: The answer that Duane gave was
14 what I wanted him to say, not me. But that's true. We
15 had our architect engineer go in each building, quantify
16 each one, and I believe he has a table of condition for
17 each building. And this site visit was to give you an
18 indication as to which one you wanted to see based on
19 the documents. Therefore, every unit was open to all to
20 see and plan for.

21 MR. WADSWORTH: I guess I don't know what I
22 heard there, but I guess what I'm saying is, I didn't
23 measure every piece that was left and mark down every --

24 MR. NAKAMOTO: Well, let me just say one more
25 time: The plan that you find in the specifications has

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1 a table of each building of the conditions that were
2 surveyed. Those are the documents that you will be
3 working with.

4 MR. WADSWORTH: Yes.

5 MR. NAKAMOTO: The site visit today was to give
6 you the opportunity to actually define how that table
7 was put together and to determine, in your own mind, the
8 condition that the building is in. So therefore, we
9 left the site visit open with enough time in it to see
10 each building. And if the conditions are changed, then,
11 like Duane says, it's a basis for a claim for new
12 discovery.

13 Did that answer the question for everybody?

14 I can make it probably simpler, too.

15 MR. JOHNSON: The thing you have to do is
16 balance all the information that's given to you. It's
17 hard to absorb all that in a quick visit. And when you
18 get to the building and you take the sheet that covers
19 that building, does indeed that sheet depict what you're
20 finding in that building? If it doesn't, that's a
21 different condition than you were given.

22 But it very well -- You know, you look at a few
23 sheets, and then you look at a few buildings, it's hard
24 to balance it all out in a quick visit.

25 MR. NAKAMOTO: In each one of those buildings,

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1 which we tried to make it so that every building was
2 surveyed, and I'm not saying that it was completely
3 surveyed. I mean, we did the best we could. So if you
4 went into a building of a particular model and you went
5 into one particular bedroom, if three walls were down,
6 the other one was intact, that reflects on the drawings.
7 We have a table. Each building has a table. I think it
8 has by rooms, the condition of the --

9 MR. KORSLIEN: This one is just by building.
10 The sheet you're referring is A2.5. That's the
11 demolition matrix. So it's not down to the room, it's
12 just by building.

13 MR. NAKAMOTO: Okay, by building.

14 So that's how the survey was done. I don't know,
15 we're kind of beating this horse to death, so I don't

16 know how else to explain it. But the site visit was
17 then to give you a confirmation, visual inspection, to
18 determine exactly, in your mind, what would be the
19 balance of how you would see the project.

20 MR. DIDRIKSEN: Derek, with Dick Anderson
21 Construction. So I guess to make this clear in my mind,
22 I know we've been talking about this for a minute, but
23 do we bid the percentages in the table? Or there's a
24 note here that says percentages should be site verified
25 by the contractor.

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1 Which I'm in agreement here, we didn't have time to
2 go through and verify all the percentage of all these
3 items for all the buildings.

4 I mean, it seems to me that we've got to bid the
5 percentages shown. Am I accurate in saying that?

6 MR. NAKAMOTO: Well, I'll tell you, whenever
7 you do remodeling work -- You know, I used to be a
8 designer, so I can understand how the documents are put
9 out. But sometimes when you have a building, you
10 consider the age of the building, and sometimes, if
11 you're fortunate enough, you have a building taken out;
12 in this case, this project. You have a perceived idea
13 that certain materials may be deteriorated to the point
14 where we can put a percentage in.

15 As an example, you can take a building and you can
16 say that because this building was built in a certain
17 area or era, that a certain percentage of the wood may
18 be deteriorated that you have to take out. So how do
19 you quantify that? Well, you do it one of two ways.
20 You can take measurement and payment, which in this case
21 probably is too much, or you can take a ten percent.
22 You can say it's ten percent and put that into a base.

23 And then other people will say, well, you can't
24 really do that, because you cannot come out ahead. So
25 you have to kind of weigh the balance between is it a

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1 good percentage or is it not. Most of the time, and I
2 don't want to put words in any anybody's mind, but if we
3 were to say that each building has so much
4 deterioration, I can just see what's going to happen.
5 People are going to come back and say, "Now, wait a
6 minute, we measured this thing, because I got the job,
7 and it's not quite right."

8 So you take a percentage, the best guess you could
9 get; and then when you're working the numbers, if you
10 feel that it was more or less -- if it's less, you're
11 not going to tell me about it; if it's more, you're
12 going to bring it up to that guy right there.

13 MR. WADSWORTH: Well, I think that makes sense.
14 But the problem is they were saying it's 100 percent,
15 and in fact, probably a lot of them are only 70 percent.
16 So they never made a very good educated guess even.

17 MR. NAKAMOTO: Well, I guess the answer now
18 would be to submit it to the Techbid, and then we may
19 have to investigate it further; perhaps get a different
20 reading on it. But that would be the position we would

21 take.

22 MS. GARY: How many buildings did you see
23 today, out of the total?

24 MR. WADSWORTH: I don't know. We looked at
25 just a couple of them, didn't we, Derek, and saw that?

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1 MR. DIDRIKSEN: Yeah, I don't know that I saw
2 that particular instance, but the ceilings in a couple
3 of them -- but I didn't check them all. 4029 and 4030
4 were a couple I took a look at, and they had -- I know
5 there were ceilings left in them.

6 MR. NAKAMOTO: What I can tell you right now is
7 if you place your question in to Techbid, we will
8 examine those questions, and if we have enough interest
9 in it, then we will make a decision to maybe quantify it
10 further.

11 MS. GARY: Were all the buildings open for
12 everyone to look at?

13 MR. NAKAMOTO: I would say that all the
14 buildings that were not intact, it was possible to
15 enter. The ones that were not, some of them were
16 locked. But they were intact in the fact that there was
17 power, you could actually move in and operate.

18 MR. JOHNSON: I know in doing remodel work -- I
19 used to have a small construction company, and
20 oftentimes, on something like this, some estimates would
21 be on one side and some estimates would be on the other
22 side; and hopefully, by the time you get to the end of
23 the project, it's balanced out. But if it's too heavy
24 one way or the other, then one of the parties wants to
25 get compensated for it. And generally, as the

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1 contractor, you would only complain if it was weighted
2 so that you were spending more time on the job than
3 you'd anticipated. But maybe it will balance out, maybe
4 it won't.

5 MR. WADSWORTH: But I would have thought if,
6 when they wrote that thing, they'd have said between
7 20 percent and 30 percent, or something, instead of
8 saying exactly 100 percent or 40 percent or like they
9 did. I think they'd have left that kind of, instead of,
10 you know...

11 MR. NAKAMOTO: Well, sir, I would invite you to
12 make that question in an official inquiry, and we have
13 others that are available to search that question and
14 get an answer. For instance, we have our engineers of
15 different discipline, plus we have the, the architect
16 engineer that we can send that information to and get a
17 response, a proper response.

18 MS. GARY: Actually, we have it on record now,
19 the whole discussion.

20 MR. GAMBLE: Jack Gamble, Base Civil
21 Engineering. If you don't have time to go back in there
22 and have the AE do a survey to better quantify it, could
23 you set it up under a unit price bid schedule for an
24 estimated quantity and just pay for the demo on the
25 actual quantity coming out, being demoed?

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1 MR. NAKAMOTO: We can consider that. We can
2 consider that.

3 MR. WADSWORTH: Do they actually break that
4 down -- I don't remember -- on how much a square foot of
5 sheet rock, how much a square foot of whatever, how much
6 a door, that kind of thing? I mean, if there was
7 something done there so if it's over that amount, your
8 price is a dollar a square foot or whatever to...

9 MR. NAKAMOTO: I'm not sure we covered it that
10 way in this case. I know in large civil engineering
11 type projects, we do that, when you're dealing with
12 maybe thousands of cubic yards or thousands of unit
13 measure. When you're dealing with residential work,
14 that may not be the appropriate avenue to take.

15 And we have, we have the discussion documented, so
16 obviously, we'll have to answer that, and I think we
17 probably can get a much more satisfactory answer if this
18 doesn't serve as a reasonable answer to you.

19 Okay, is there any other discussion?

20 If not, I am going to call for adjournment, and the
21 session is now adjourned. Thank you very much for
22 coming.

23 (The proceedings were concluded at 2:21 p.m.)
24
25

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1 COURT REPORTER'S CERTIFICATE

2
3 STATE OF MONTANA)
ss.
4 COUNTY OF JEFFERSON)
5
6

7 I, CHERYL ROMSA, Court Reporter, Notary Public
8 in and for the County of Jefferson, State of Montana, do
9 hereby certify:

10
11 That the foregoing proceedings were reported by
12 me in shorthand and later transcribed into typewriting;
13 and that the -62- pages contain a true record of the
14 proceedings to the best of my ability.
15

16 IN WITNESS WHEREOF, I have hereunto set my hand
17 and affixed my notarial seal this 7th day of February
18 2002.
19
20

21 CHERYL ROMSA
Court Reporter - Notary Public
My Commission Expires 8/4/03
22
23
24
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TECHNICAL QUESTIONS

Page 15, Gentry Lemerond, Enterprise Electric: On the site plans of the electrical drawings, the site is broke up into different alternates, bid alternates, A, B, C, and the base bid, and the bid schedule does not reflect that, the electrical site plan has alternates written on it.

Answer: *The reference to bid alternates has been removed from the electrical plans. See Plates E1.1, E1.2, and E4.1 reissued with Amendment R0003.*

Page 15, Jim Lake, Swank Enterprises: Couldn't find where or which bid item for all the landscaping, irrigation. Does that lump in with all the utilities? Did not see where in the bid schedule that it is addressed.

Answer: *Landscaping irrigation has been addressed in a separate Schedule Item. See the new Schedule issued with Amendment R0003.*

Page 18, Mark Miller, IRS Environmental: Concerning *the* Davis-Bacon wage rates, where do the asbestos abatement and the lead abatement, what category do they fall under as far as the wages go for Davis-Bacon?

Answer: *General Decision MT010026, 3/02/2001, Cascade County – Residential These classifications would have to be conformed to the wage decision using SF 1444 - Request for Additional Classification and Rate. The sooner the contractor can submit the request, the better. A point of contact will be provided with the award letters on whom to submit these classifications.*

Page 19, Mr. Lake, Swank Enterprises: What about all your sidewalks (where are they addressed in the Schedule)?

Answer: *Sidewalks have been addressed in a separate Schedule Item. See the new Schedule issued with Amendment R0003.*

Page 24, Mr. Lake, Swank Enterprises: When Nancy was talking and the slide was up, it sounded to me like the slide was saying something different than what she was saying over whether price has more effect on the award, or the technical qualifications. I thought the slide said that and then she said kind of the opposite. all of the technical qualifications shall not in sum exceed the value of the price, or something like that.

Answer: *Correct text provided on page 10 of the Transcript of the Proceedings to read: "All factors other than cost or price, when combined, are significantly more important than cost or price. However, if the technical proposals are close, price will become more important."*

Page 30, Vic Shanks, Great Plains Insulation: I have a question on the evaluation factors for award, the last thing you just said, extent of small and small disadvantaged business participation. Would you define that a little bit, what you consider small business and small disadvantaged business?

Answer: *Reference FAR 52.219-8 and 9*

Small Business and SDB is defined as follows:

"Small business concern" means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on government contracts, and qualified as a small business under the criteria and size standards in 13 CFR Part 121 (see 19.102). For this solicitation, a concern is considered small if its average annual receipts over the past 3 years do not exceed \$27.5 M.

Regarding the SDB firms: To be eligible to receive a benefit as a prime contractor based on its disadvantaged status, a concern, at the time of its offer, must either be certified as a small disadvantaged business (SDB) concern or have a completed SDB application pending at the SBA or a Private Certifier. The firm can check the ProNet site at www.sba.gov to determine whether or not a firm is certified or has an application pending.

Further Clarification:

There are two separate requirements in the solicitation regarding small business participation. First, Large businesses only are required to submit a Subcontracting plan with their proposal. The second requirement is one of the evaluation criteria on Small Business Participation. This information has to be submitted by EVERY OFFEROR whether or not they are large or small. One of the technical criteria has to do with the amount of participation of small, etc. businesses. Unlike the Subcontracting plan that is only submitted by large businesses and only considers what the firm is subcontracting; this technical criterion is evaluated for all offerors. For large businesses, 100% of subcontracted work will be considered. If the prime is a small business, all work will be considered.

Page 33, Vic Shanks, Great Plains Insulation: My question is, what do you consider small businesses that are disadvantaged?

Answer: *Federal Acquisition Regulation Clause 52.219-8*

(c) defines as follows:

Small business concern means a small business as defined pursuant to Section 3 of the Small Business Act and relevant regulations promulgated pursuant thereto. Small disadvantaged business concern means a small business concern that represents, as part of its offer that --

(1) It has received certification as a small disadvantaged business concern consistent with 13 CFR part 124, subpart B;

(2) No material change in disadvantaged ownership and control has occurred since its certification;

(3) Where the concern is owned by one or more individuals, the net worth of each individual upon whom the certification is based does not exceed

\$750,000 after taking into account the applicable exclusions set forth at 13 CFR 124.104(c)(2); and

(4) It is identified, on the date of its representation, as a certified small disadvantaged business in the database maintained by the Small Business Administration (PRO-Net).

Page 34, Mr. Lake: When we submit the subcontracting plan, it doesn't have to list every individual subcontractor that we're going to use, does it? It's just the goals that we're planning to meet.

Answer: In the Subcontracting Plan that is required of large businesses, no credit is given for the work done by the prime (because they are large).

*In Criteria Number Six, "Extent of Small and Small Disadvantaged Business Participation", a prime contractor will get credit for the work that they are performing because they are small, even though they are a prime. **The subs should be listed in both places by name**, and if the prime switches a subcontractor, the prime would need to use a similar business size, or they would not meet their goals and could face liquidated damages.*

Page 37, Vic Shanks, Great Plains Insulation: I have a question for Nancy. Is there any protection for the small businessman when he makes a bid to a contractor? Does my bid go in with that contract? Sometimes -- I bid a lot of work, and contractors get it, and I think after they get the job, then they start shopping around for a lower price than mine. And I was just wondering if there was any protection for the small contractor at all.

Answer: We are only concerned with the prime contractor. If he makes a business decision to go with another firm and it does not affect the criteria of the RFP or the basis of award, we do not get involved with his business decisions. He has to ensure he is meeting the quality required in the contract.

Page 38, Mr. Wadsworth, Wadsworth Builders: If we write down that we're going to use a particular sub, and then down the line, if we want to change, is there any way to change subs?

Answer: If you have a subcontractor and he is not performing, it would be in your best interest to find another firm to do the work. You are responsible for the quality, timeliness and cost of the project. If you can not find another firm who is a small business you need to contact our SADBUs immediately and let her know what is happening.